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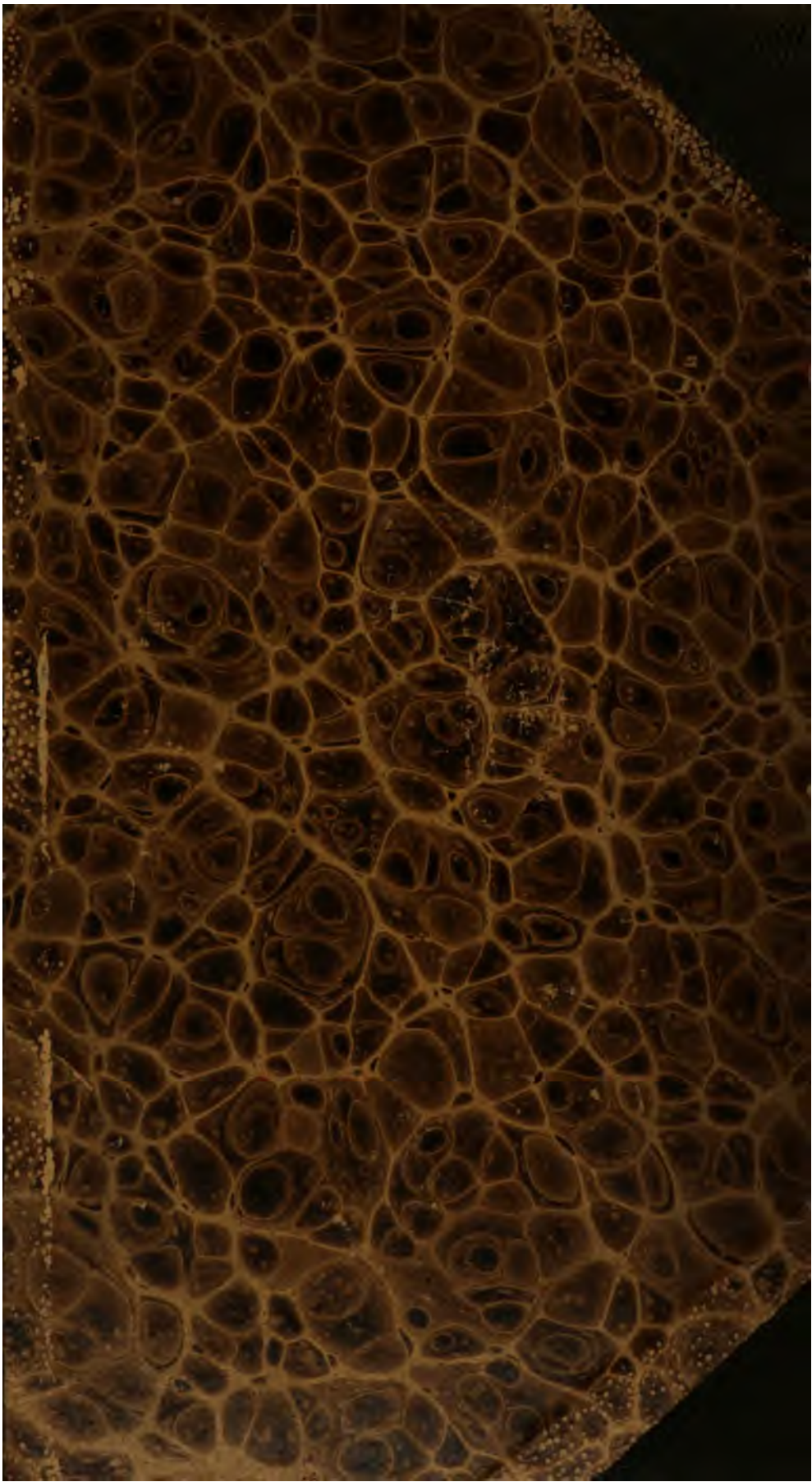
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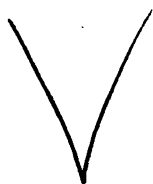
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BUFFALO

MEDICAL JOURNAL

AND

MONTHLY REVIEW

OF

MEDICAL AND SURGICAL SCIENCE.

EDITED BY AUSTIN FLINT, M. D.

VOLUME ~~FOURTH~~.

For 1849

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BUFFALO MEDICAL JOURNAL

AND

MONTHLY REVIEW.

VOL. 4.

JUNE, 1848.

NO. 1.

ORIGINAL COMMUNICATIONS.

ART. I.—*Old Physic and Young Physic; in School and out of School.*
By WM. TREAT, M. D.

[The following address was delivered before the Young Men's Association of this city. Although written for a popular auditory, it is believed that it will prove acceptable to the medical reader. It has been obligingly furnished for publication by request of the editor, which, it may be added, was made at the suggestion of several medical brethren who listened to its public recital.

The length of the address has rendered it necessary to exercise the editorial prerogative of marking out some portions, not inferior in excellence to that which is retained, and notwithstanding this curtailment, it is deemed advisable to divide it between two numbers of the Journal, so that it may not encroach on subjects of a more practical character.—ED.]

The uncertainty of health—the uncertainty of life—the uncertainty of the weather—among the uncertainties, are the most fruitful, and, yet, often, most fruitless topics of conversation.

Our greetings, and our modes of salutation, in private and in the market place, appear to take their form from the uncertainties we have named. Here the opinions and suggestions for health, and probabilities of weather, of all our charities are most freely bestowed; often, we apprehend, for this reason—they cost us nothing.

To be able to foretell, to prognosticate the weather, one may obtain not a little insight by personal observation, and an accumulated personal experience, limited to the narrow range of one's own sentient organs, it is true,

but such observations collected from the many, furnish the elements for basis upon which is upreared the science of meteorology, the province of which is to determine and define the unchanging laws which govern the changing wind and weather, subjects about which we are inclined to converse so much, knowing, as we do, so little.

Eighteen centuries ago, one who "spake as never man spake," said of the wind:—"It bloweth where it listeth, and no man hath knowledge whence it cometh or whither it goeth," and cited the then existing proverb "ye look upon the sky in the morning when it is red, and ye say we shall have rain, and it is so." The chain of causes traceable from these phenomena fall within the province of the natural philosopher; and a previous knowledge of the laws of light, reflected and refracted, must be presupposed, before the exercise of our reasoning upon them can be of much avail. Hence, scientific explorers have sought instruments of admeasurement, and joined to them, a technical lore as an instrument for conveying thought to others—compassing the whole range of natural phenomena, and comprising the observation of the *facts* collected from all observers—whereon they build their theories—their philosophy of the weather. In the exercise of their cabala, we hear certain magic words, solemnly pronounced, such as cumuli, strati, cirrhus and cerro-strati, of barometers, thermometers, rosometers, pluviometers, and hygrometers—isothermal, irothermal, isochemical, and other lines, accompanied with mathematical calculations of physical counteracting agencies, such as mountains and valleys, oceans, lakes and gulf-streams, and, behold! we have mapped in outlines, the cycle of atmospheric changes, wanting a few minor elements to mark them with the same accuracy as the meridian lines upon an artificial globe. Results astounding to the uninitiated,—unheeded, uncared for, are such rules, and such demonstrable laws, by the isolated observer with whom we have just met on change, made our salutary inquiry, received the benefit of his experience, awarded the epithet of an old sea-dog, by consequence as weather-wise or weather-worn, and jostled on to our respective avocations basing thereupon the exposure of fleets upon our lakes or oceans, laughing in the pocket at our cheaply obtained opinion, and at the new-fangled instrument, a barometer, feeling quite assured it can foretell comparatively nothing, when put in requisition after the oracular opinion of this experienced son of Neptune!

Having by transposition made *our* salutary greeting, first upon the weather, we come now to speak of that other popular theme—individual health and that of our households. As to the public health, we must leave

that to the multitude of political doctors, with whom, of course it is to be supposed there are none but knowing ones—here can be no quacks!

Since, with the many, our streets, our market places, and our social circles have been converted into forums for the discussion of elementary and profound science, and every new dogma, not to say absurdity, has there found its adherents, pertinaciously urging the merits of their utopiad, much need is there of the labors of the critic, with his fan ever in his hand to winnow out the few grains of truth. Especially has this become needful in this supposed age of innovation in the theory and practice of medicine.

In this department we design to speak of some of the most vaunted, and, at the same time, endeavor to refer them back to their lost parentage. As a preparative therefor, we are impelled to ask your indulgence, while, as concisely as possible, we trace the early history of medicine, and from their numerous schools indicate their parallels; in one discourse we can hardly hope to do more than this. For, unless schooled in the past history, one may well suppose never was there, like this present, such an accumulation of theoretic and experimental wisdom.

We venture nothing in affirming that observations made upon the phenomena of disease, and the operative action of medicine, have been accumulating from that period, when sin

“Brought death into the world and all our woe.”

These observations, in proportion to the industry, facility, sagacity, and judgment employed for their accumulation, have been seized upon, gently swayed, or dragooned into hypothetic, or theoretic views of disease, and curative agency. Out of these have sprung the schools of medicine, holding each their own set of dogmas, and having their followers as devoted as those of modern party or sect, while in all time, including this present, there have been found solitary individuals laboring zealously to detract from the former to make way for a fabric of their own, and often with success, foisting upon the community and age dogmas absurd past ridiculous, and far beyond what the culture of their time would warrant. From their multiplicity we shall be unable to allude to many of these, though they would be found of service in elucidating our subject in its modern, or new school aspect.

There is a prevalent opinion that what is now termed regular practice in medicine has stood unassailed until the present period, and, now assailed, it must needs fall. The falsity of this will become apparent as we progress.

In the early history of our race, indeed for some centuries, we have reason to believe, there were no individuals or class of men, who devoted

their lives to the acquirement and practice of the healing art. Division of labor, and singleness of occupation, which has wrought wonders in the whole range of physic and mental employment of men, is a more modern device. The art of prescribing for disease was vested in the multitude, and they expressed their opinions, and made their remedial suggestions, as opportunity presented, and a common sympathy, or enlightened benevolence dictated. The sick, even as late as our Savior's time, often sat in the gateway of some walled city, or other public place, in expectation of counsel from some passer by, who had become skilled by observation at home, or schooled by travel abroad. Indeed, among the Hebrews, law required such advice to be given. Yet, the sick were not left solely to such casual resources. To the priesthood was committed the especial care of the sick among the Jews. Indeed, the priesthood, in all time, and of all countries, have been the conservators of learning, to whom the world of literature is greatly indebted for the preservation of its sacred and profane lore.

Ante-dating the period of Jewish organized priesthood, the Egyptians had made respectable acquirements in the healing art, acquirements which they retained centuries after the Jewish nation or tribes were dispersed. Though, with the valuable, they associated the practice of magical incantations.

But it is from the final subjugators of the Jews—the Romans, and the crowned or rising empires of that period, we are to seek historical record of the exodus, the coming out from the learned a few individuals, though not Roman by birth, whose especial province was the culture and practice of the *art* of medicine—not then a science.

Much that is fabulous, no doubt, is interwoven in the biography of these persons and their times, augmented by tradition, superstitious reverence, or cunning device artfully wielded, and turned to the emolument of the avaricious, or fame of the aspiring would-be hero of the coming centuries. Indeed, so much of the fable find critical writers upon the history of this period, and of medical history, that attempts at the throne, and doubts of the personal existence, of one considered for ages the great founder of the medical art, have been, and by some, are even now entertained. By these, the stories of *Æsculapias*, and his temples, are placed in category with that part of Roman history which treats of *Romulus*, his foster mother the wolf, and his exploits while in that nursery. What this latter story is to Roman history, is that of *Æsculapius* to the history of medicine, neither the one nor the other can begin, much less advance, unless by conceding

as verities much that is fabulous, as a spinning point, whereto may be attached the remote end of the thread of history.

In about the 13th century before Christ, we are told that Chiron, a prince, probably from Thessaly, became the instructor of a foundling reared by a shepherd, whose pupil made such proficiency in the medical art, that the jealousy of Pluto led to his death, because he rescued so many from the grave. In the person of this foundling we have the world-renowned *Æsculapius*. He transmitted his profession to his two sons.

From that great Pope, popular credulity, we must ask a special dispensation, in the outset, for entertaining belief in one hero and demi-god in the old school aspect of our theme, trusting we shall not ask in vain, when its liberality is considered in granting to what is termed the new school, one for almost every day in the calendar. That a great man, full of practical wisdom, had being in the remote past, bearing some name, be it *Æsculapius* or some other, who wrought upon the imagination, as well as cured disease by potent remedies, we have no doubt,—one who bears in medical mythology the same relation that Odin, or Woden, does to the old Norse's ruling god among his chief divinities.

For 13 centuries and upwards, before the Christian era, temples dedicated to him were served by his reputed descendants, acting priest and physician in one person. These individuals were called *Asclepiades*. Though they, or their patients when cured, kept record of diseases treated, and medicines given, and deposited them in the temples, yet we have no record that from their protracted experience and observation the science of medicine made any progress in their hands up to the time of Pythagoras, about the 5th century, when Hippocrates, an *Asclepiad*, of the 18th generation from this demi-god, appeared, and officiated in the temple at Cos. He, as also the others in this temple, attempted an analysis of the facts in their collection, and based theories upon them; and thus arose the Hippocratic or Rationalist school, in contradistinction to those priest-physicians at the temple of Gnidos, who, in their treatment of diseases, professed to disregard all theory, and rely solely upon collated facts—these latter were called *Empirics*.

These rival schools, or sects, were nearly balanced in numbers for several centuries, and engaged in a war of words—since it is evident to us the one cannot reason without facts, and the other could do nothing with facts without an exercise of reason. The question with them, therefore, appears to resolve itself into a degree or governing proportion, which the one mode should have over the other.

The prevalent philosophy at the time of Hippocrates, (the Pythagorean) is visible in all his writings, and lies at the bottom of all his medical hypotheses. Up to this day, and so it ever must be, medicine, as a science, can only keep pace, and never move in advance of the current philosophy, or hand maiden sciences which minister to it. Like Geology, its birth and advances are chained by an inevitable necessity to the sister sciences, and, as a consequent, its car must move in rear, or in train with them, or ever remain stationary.

Asclepiades of Bythnia, who flourished in the time of Pompey, 50 years B. C., was a follower of Epicurus in his philosophy, adopting his doctrine of atoms and pores, (while he practiced medicine as a mere charlatan.) He advanced a new theory, on the supposition that all diseases arise from the obstruction of the pores, and irregular distribution of the atoms, of note as a leading feature with a modern sect, who practice steaming thus to open the pores.

His pupil, Themison, founded the Methodic school, which flourished the first two centuries after the Christian era, and out of it uprose, as subdivisions, the Pneumatic, from *pneuma*, spirits, which were believed, with solids and fluids, to compose the corporeal frame, and the Eclectics, of no note in this connection.

At this period Galen appeared. Schooled by travel in the learning of the age, he was invited to remove from his native place, Pergamus, in Lesser Asia, to Rome, by the Emperor Aurelius. The weight of his name thirteen centuries did not suffice to overcome, and in all this time his opinions were deemed a sufficient argument against any new hypothesis, or alleged matter of fact.

The science of medicine withstood the shock, longer than science and literature in general, during *the middle ages*, but with these finally retreated to the Moors and Arabians, who were preservers of the works, and imitators of Galen. By the intervention of the Crusaders it was brought into Italy and France, having gathered in Arabia a new feature from the science of Chemistry, then in its inception. Out of this arose the sect of Chemists, and a contest with the Galenists followed, which continued through the 16th century. Indeed, there comes, booming over the night of time, its echo, yet heard in cry of nominal botanists against the mineral doctor! A cry, at this late day, as senseless as one from the awakened century sleepers would be against witchcraft, such have been the changes in medical science and medical practice! The Galenists were *then*, for the most part, more learned and scientific than their adversaries; they

counted in their ranks the University professors (which institutions were planted all over Europe in period from 13th to 16th centuries.) Their pupils, although strongly attached to Galen, were, in some degree, independent observers of the phenomena of disease, and collators of facts. Yet, their practice was complicated, and inert ; their medicines were derived principally from the vegetable kingdom (though the animal was made tributary.) Their prescriptions were long and multifarious, consisting of a large number of ingredients, combined together in such a manner as to render it almost impossible to conceive the probable operation of the compound.

The *Theriaca Andromachi* is an example. This contained, with flesh of vipers, sixty-two vegetables, and was used as a counter poison for more than 16 centuries. The inventor of this villainous compound was the Archiater, or royal physician to the Emperor Nero, and we find it approved by Manget, royal physician to Frederick I, king of Prussia, as late as 1703, from whom we shall quote hereafter. Each ingredient was believed to have the properties, thus combined, of effecting a specific cure upon some one disease — thus exceeding a vaunted remedy of our city, which boasts of 22 vegetable remedies, so happily combined, as to work wonders in this our day.

The *Chemists* were bold empirics at first, but, in time, acquired skill and science. They discarded the long prescriptions of the Galenists, rejecting a great many of the articles of their pharmacopœia, while they introduced the active metallic preparations, and made free use of most powerful articles of all kinds. Thus both were reprehensible — the Galenists for use of weak, and often inert agents ; while the Chemists were rash in the use of potent ones.

As we have some old, as also modern authors, who were Galenists before us, we have thought it might be of interest to give a few examples from each of these, illustrative of Galenic practice, for centuries ; while, at the same time, they serve as answers for many modern sects, whose disciples boast of experience, and their personal observation of facts, to the accuracy of which they are ever ready to vouch, as well as to cite authority, for the like, from some of the rulers of the land, as well informed perhaps, as themselves.

In an astrological Herbal written by Nicholas Culpepper, the son of a puritan clergyman, practicing physician two centuries ago, though not of the College, but popular in his day, we find every plant is by catalogue enumerated, and the planet which governs it named. Here we read of:—

"*Onions*.—Mars owns them, and they have gotten this equality to draw any corruption to them, for if you peel one, and lay him upon a dung hill, you shall find him rotten in half a day, by drawing putrefaction to it. Thus being bruised and applied to a Plague sore, 'tis very probable 'twill do the like!" Sundry modes of preparation are then given, not differing materially from any modern matron, who has the practice from tradition.

Of *Saffron*, and the oft met-with saffron tea in the nursery, we have the following cogent reason for the continued use of an inert plant:—"It is an herb of the sun, (judged by its yellow color,) and therefore you need not demand a reason why it strengthens the heart so exceedingly. Let not above ten grains be given at a time, for if the sun, which is the fountain of light, may dazzle the eyes, and make them blind, a cordial, taken immoderately, may hurt the heart, instead of helping it. It quickeneth the brain, for the sun is exalted in Aries, as well as he hath his house in Leo. It is excellent in epidemic diseases, such as measles, and is a notable remedy for yellow jaundice." So saith also any coterie of old women, and we know that children often cry for it, as is advertised of certain lozenges, for reason to be found, we apprehend, in the vigorous hand which plies the often repeated and well filled spoon.

Of *Golden rod*,—He says:—"Venus claims the herb, and therefore, to be sure, it restores beauty lost." Not unlikely, in this Golden age, if they were ingots of gold.

Tansy, which, he assures us, is woman's best companion, their husband excepted—though its virtues are unlike the

Periwinkle, which, eaten by man and wife together, causes love between them.

And the sighing Benedict may find help for *envy* and *despair* in that quarter, by drinking a decoction of *Melancholy Thistle*, which expels superfluous melancholy besides, and makes a man as merry as a cricket. Dioscorides saith the root borne about one doth the like. Modern writers laugh at him: *Let them laugh that win*. My opinion is, that it is the best remedy against melancholy diseases that grows. They that please may use it.

Of *Rue*, our author says the leaves mixed with figs, walnuts and juniper berries, forms Mithridates' counter poison, (a mixture, by the bye, that has stood the test of centuries, and now is exploded,) is used against the plague and all venomous poisons are rendered harmless by it—*slanderers to the contrary*—"He that doth use but the quantity of a hazl nut of that receipt

every morning, shall preserve his body in health if he do but consider that Rue is an herb of the Sun and under Leo, and gather it and the rest accordingly!"

Shade of Sanctorius!—in this thy day of invention of the thermometer, thou didst announce thyself as author, and publish "On the method of avoiding errors in medicine." We apprehend from this, and what treatises we have yet to quote from a later age, thy book must have fallen cold as zero upon the leaden public—for the froth, by ebullition, which has followed since in medicine, indicates a boiling point somewhither. Is it in the first that follows. We will see;—

A book by the Rev. John Wesley, entitled "Primitive Physic, or an easy and natural method of curing most diseases," is now in our possession, the edition 26th. A valuable work one would think this, which has met with such public favor, and been subject to revision by the author from time to time, so arranged by notation of the best remedies for every disease named, and often with the additions of "Good," "have tried it," and an occasional *I.* denoting infallible! As at this present day the testimonials of distinguished clergymen in favor of new remedies in medicine are most valued, (though in our city, to *their* credit, not often to be procured,) we offer a few endorsed by this great leader, not to say founder of a religious sect. This we do the more freely by way of atonement for the hard names, deserved of course, which he bestows on the regular physician for selfishness in locking up the ripe knowledge and practice of medicine from the multitude. He evidently is no rationalist, but must be classed with the Empiric, as he denounces all theory, &c. We thumb his papers, and copy:—

"*For the Ague:* 5th best out of 28 remedies: apply to the stomach a red hot onion, slit. 6th best, frankincense and nutmeg spread on linen and applied to the pit of the stomach. I have never yet known it to fail."

"*For the Asthma:* 4th best out of 17 remedies: Live a fortnight on boiled carrots only. It seldom fails."

"*Bleeding at the nose.* No. 1, drink largely and eat much raisins."

"*A Cancer in the Breast:* Take warts that grow on the inside of horses' fore legs, dry them, powder, sift, and steep in two quarts of ale, drink half a pint every six hours in warm new milk. It has cured many. *Tried.*"

We have thus far only turned the first 20 pages of this book. A few more of these recipes from it and we have done with it.

"*For Hooping Cough.*—Rub the feet thoroughly with hog's lard, before the fire at going to bed, and keep the child warm therein. *Tried.*"

"*For a Consumption:* Cold bathing has cured many deep consumptions—*tried*. Or, every morning cut up a little turf of fresh earth, and lying down, breathe into the hole for a quarter of an hour. I have known consumption cured thus."

"*For Gout in any Limb:* Rub the part with warm treacle, and then bind on a flannel smeared therewith. This has cured an inveterate Gout in 36 hours. Regard not them who say—The Gout ought not to be cured. They mean it *cannot*. I know it cannot by their *regular prescriptions*. But I have known it cured in many cases without any ill effects following. I have cured myself several times. Treacle in same way cures rheumatism. *Tried*."

"*For Scrofula, or Kings Evil:* Drink half a pint of tea twice a day, for four months, made from a dried burdock leaf. I have known this to cure hundreds."

"*For a broken shin:* Bind a dry oak leaf upon it, or put on a bit of white paper moistened with spittle. *Tried*."

"But fasting spittle, outwardly applied every morning, has sometimes relieved and sometimes cured Blindness, deafness, contracted sinews, corns, warts, &c."

Taken inwardly, it relieves, or cures Asthmas, cancers, epilepsy, gout, king's evil, leprosy, palsy, rheumatism, scurvy, stone, and swelled liver.

"The best way is, to eat about an ounce of hard bread, every morning, fasting two or three hours after. This should be done in stubborn cases, for a month or six weeks!"

In short this book is the mother of abominations, and some one of its infallibles has to be met and answered daily in the physician's round. Its eye washes must have destroyed the sight of thousands!!!

Of Galenism, its ancient and modern advocate, these examples may well suffice. In compounding the witches cauldron, Shakspeare made no draft upon his imagination, but wrote of popular remedies in his day—of the animal part of the contents of the cauldron, we shall give examples speedily from one or more writers in about the beginning of the 18th century, but now leave Galenists with their

"Roots of hemlock, digg'd i' the dark
And slips of yew
Shiver'd in the moon's eclipse,"

to which is added "grease that's sweaten from a murderer's gibbet," and jump our history of medicine with a brief summary of its present condition evolved from the old schools :

A multiplicity of rival schools and teachers throughout Europe, begat their legions of theorists, as well as practical observers, and, as in preceding instances, cited more in detail, they all contributed, and are contributing to the advancement of the science of medicine. From this eminence its votaries overlook hill and dale in the past periods of medical history, holding no quarrel with the disciples of its former schools, but rest content with culling from their practical wisdom ; viewing nought of too little import to be passed unheeded, in its comprehensive grasp seizing all, and submitting them to the crucible of a searching scrutiny.

Its chief element is *Hippocratic*, or Rational, in that it demands the exercise of a sound judgment—*Empiric*, in quest of facts throughout all the various schools, conjoined with personal observation—*Galenic*, in search of vegetable medicaments—yet *Chemical*, in not discarding minerals deemed really valuable. *Anatomical*, in that it would know of the mechanism of the body in health, in order to treat it when in a morbid state—*Physiological*, in that it seeks a knowledge of the uses of the various parts of the body, that a perverted action may be known, and ministered to—*Mathematical*, as well as of *Vitalists*, in so far as pneumatic, hydraulic, and muscular forces, are found in common contributing to the movements of fluids and solids of the body—and *metaphysical*, in that it recognizes the action of mind upon matter as a curative agent—and these all combined constitute, what now it really is in name and teaching, the *Eclectic school*.

With these elements from the various schools, and many more not enumerated found in it, wherein lies the foundation to the accusation that the old school, or Eclectic, is not open to improvement, but remains ever incrustated in its views :—unless it be incrustated in an inflexible conservatism, always penetrable to truths which presents in harmony with the sciences and philosophy of the age? In passing hastily over the dogmas which constitute its elements, we are not disconcerted at the charge of incrustation, but accept it, when we take into view the habits and growth of the animated crustacea, even as presented in the largest of the tribe, *the lobster*,—of which we are told, in the growth by assimilation of the food of life, for want of room he bursts his crusty shell—expands nearly one third in size, and, by secretion, forms another, and, by repletion, yet another shell to be cast as before. Is not here the evidence of growth?

But naturalists inform us there is another species of lobster, the soldier, or lobster crab, that comes from, we know not where, but appears from over-land, at the ocean side, when the true lobster sheds his crusty shell

But what Nature has denied this animal, it takes care to supply by art : and taking possession of the shell of some other animal, it resides in it, till, by its growth, it is compelled to seek another. Hear what a celebrated Naturalist says of him :—

“ The little soldier is seen busily parading the shore along that line of pebbles and shells which is formed by the extremest wave, still, however, dragging its old incommodious habitation, [like the traditionist] at its tail, unwilling to part with one shell, even though a troublesome appendage, till it can find one more convenient. It is seen examining one after the other, occasionally slipping its tail from the old habitation to try on the new, till, at last, it finds one light, roomy and commodious; to this it adheres, though the shell be sometimes so large as to hide the body of the animal, claws and all, and then it retreats to the mountains again.”—*Buffon, etc.* 18, 210.

Having devoted more time than we intended to the growth of the old, or Eclectic school, we hope to compensate for it by the facility it promises to afford by way of elucidating the *New*; cast off shells, *membrana disjecta*, or fragments, constituting, with some of them, their sole elements.

Thomsonianism or the Botanic school, as it delights to be called, (though we never had the good fortune to meet with a member of it who had knowledge of botany) we have seen cleaving to Galenism, and its body hid in it, and decrying Chemicals, while their caudal end is, at the same time, fixed to the doctrine of obstructed pores which preceded it—there we must leave it—with help of trumpet of fame of a Wesley, and Culpepper, to bear its cry into the present century.

In compliance with the announcement of this lecture we come now to the task of condensing a narrative of some of the most imposing pretenders in medicine *out of school*. Had we time we might be disposed to set these forth in order of time, or notoriety, but now must be content to present them, as, like the ghosts of the past, they flit before the memory, and again sink to the deep profound with goblins damned; for

———— “ many shapes
Hath Death,—and many are the ways that lead
To his grim cave.”

Of specialities, working cures, their name is legion. Look into any newspaper, even those called religious, and you may read of them. The public treasury in Great Britain, and France, has been levied upon largely, almost yearly, to purchase the secret, or reward some nostrum vender, each differing from, and giving way to another, and all having yet one common characteristic, worthlessness! The *eau de Medicinale*, for Gout and Rheumatism; Madame Nouffer's medicine for Tape and other worms, were of this character.

The biography of one St. John Long, a basket-maker, in Ireland, elevated to post of gentleman's servant, speaks of their success. Long invented a Liniment, which netted £20,000 a year, and not only was thus elevated by wealth from an humble station, but many branches of his family also. His liniment has long since ceased to be efficacious! David Hartley, a physician of last century, was instrumental in procuring a reward from the British Parliament for Mrs. Steven's Lithontriptic, the chief ingredient of which was soap. Hartley took of this nostrum, and died, it is said, after having taken, in all, 200 pounds of soap!

Sir Robert Walpole, prime minister to George I and II of England, also died a victim to the use of a Lithontriptic.

But these illustrative materials accumulate at our hands. We give place for an account of an Elixir of Life, of American origin, as related by a Lord spiritual, Bishop Berkeley, of whom a biographical dictionary, now before us, published in Hartford, Conn. in 1845, says:—"The excellence of his moral character is conspicuous in his writings; his philosophical discoveries, particularly of the medical virtues of a medicine which we shall soon name, were of great service to mankind. He certainly was a very amiable, as well as a very great man, and Pope is scarcely thought to have said too much when he ascribed to

"Berkeley every virtue under Heaven."

Hear his testimony:—"I am indispensably obliged by the duty I owe to mankind to make my experience public!

This precious fluid is made by stirring a gallon of water with a quart of tar, leaving it 48 hours, and pouring off the clear liquor. It is a preventive of small pox, a cure for impurities of the blood, coughs, pleurisies, peripneumony, erysipelas, asthma, indigestion, cachexia, hysterics, dropsy, mortification, scurvy, and hypochondria. It is also of great use in gout and fevers, and an excellent preservative of the teeth and gums, particularly is it beneficial to sea-faring persons, ladies, and men of studious and sedentary lives."

The Bishop is apprehensive he may be suspected of reading from a quack advertisement. He proceeds:—

"From my representing it as good for so many things, some may perhaps conclude it is good for nothing. But charity obligeth me to say what I know, and what I think, however it may be taken. Men may censure and object as they please, but I appeal to *time and experiment*. Effects misimputed, cases wrong told, circumstances overlooked, perhaps, too, prejudices and partialities against truth, may for a time prevail, and keep

her at the bottom of the well, from whence, nevertheless, she emergeth sooner or later, and strikes the eyes of all who do not keep them shut."

The wonder-working power of the *Royal-touch* we must trust the graphic pen of Shakspeare to set forth.

MALCOM asks: Comes the king forth,

I pray you?

DOCTOR. Ay, sir: there are a crew of wretched souls,
That stay his cure—their malady overcomes
The great assay of art; but at his touch,
Such sanctity hath heaven given his hand,
They presently amend.

MACDUFF. What's the disease he means?

MALCOM. 'Tis called the evil:

A most miraculous work in this good king:
Which often since my here remain in England,
I have seen him do. How he solicits heaven,
Himself best knows: but strangely visited people,
All swollen and ulcerous, pitiful to the eye,
The mere despair of surgery, he cures:
Hanging a golden stamp about their necks,
Put on with holy prayers: and 'tis spoken,
To the succeeding royalty he leaves
The healing benediction. With this strange virtue,
He hath a heavenly gift of prophecy.—*Macbeth*, IV. 3.

The healing benediction has passed from royalty now, and the evil of scrofula has, by a strange vicissitude, taken its place, and the beggar, if he be the seventh son of a seventh son, is born to, and now wears this healing mantle of the prophet.

Of professed Indian doctors, professed learners of pow-wows or meta men, their name is legion, yet it is well known to the profession that our aborigines had no skill in medicine, save in the use of a few simples. Dr. Rush, of Philadelphia, a man who needs no better voucher for his fidelity than that name which he affixed to the U. S. Constitution, gathered what was known of them in his time. The medical corps acting as agents for our government in Indian affairs in the far west, have sought zealously for this reputed skill, but all report it to be idle rumor. What the Indian's skill, may be learned in any work on the early history of this country, say Bancroft's. We are informed of Gov. Winthrop's journey to cure Massasoit—"The priests, or pow-wows, were their physicians, who practiced for the relief of the sick, magical ceremonies and incantations. They acted in the character of witches, calling on the Devil to assist them * * promising sacrifices of the best things they possessed to the fiend, if he would come to their help. A pow-wow could not work his witchcraft in

the presence, nor would they have any effect upon the persons of the English—like mesmerism, first of all, it required implicit faith. We question if any of our boasted Indian doctors have been duly instructed after their mode. Here follows the schooling :

“Young men who were educated for pow-wows were forced to swallow nauseous draughts for an emetic, and when the contents of the stomach were thrown up, they were obliged to swallow the same, again and again, until the stomach itself was almost inverted.”

We would as soon rely upon that sovereign specific at Tassura, in Egypt, “Koran water,” made from leaves of the Koran, as upon Indian specifics at such hands.

German doctors without vouchers as to their education, are as little to be relied upon, the charlatans among them, having learned by tradition, follow the teaching of Manget, and use the most offensive animal substances, to this day kept by apothecaries in that country. Some of these we shall anon enumerate.

(To be concluded in our next No.)

ART. II.—*Meeting of the American Medical Association, at Baltimore, May 2d, 1848.*

First day.—The association met in the Universalist church at 11 o'clock A. M. and was called to order by the President, Dr. N. Chapman. Most of this day was consumed in preliminary arrangements and in preparing for the election of officers. Two balloting had resulted in the election of only three officers, when the association adjourned.

Second day.—The association was called to order at 9 o'clock by Dr. Jonathan Knight, Vice President.

The second ballot, had on Tuesday evening, was, on motion of Dr. Hays, of Philadelphia, set aside, as many of the members had voted under a misapprehension as to who were the nominees.

Dr. Jackson, who had been elected one of the Vice Presidents, Dr. Hays, who had been elected Treasurer, and Dr. Stille who was elected Secretary, each resigned the post assigned him, and a committee consisting of one from each State, was appointed to report officers for the Association. The committee retired to perform the duty assigned them, and

The Secretary proceeded to read a communication from the College of Pharmacy, of New York city, relative to the immense quantity of spurious and adulterated drugs which are now imported into this country, and asking

the aid of the Association in bringing the matter before Congress in such a manner as to promote the adoption of some remedial law.

Dr. Edwards, a member of the House of Representatives from Ohio, and chairman of a special committee to whom the subject of the importation of spurious and adulterated drugs has been referred in the House, was then introduced, and stated a number of facts relative to the alarming and pernicious extent to which the most important and useful articles in the materia medica are imported into this country, in a state so adulterated, as to render them totally unfit for medicinal purposes.

The thanks of the Association were returned to Dr Edwards, and the Chair authorized to appoint a committee to memorialize Congress on the subject.

The Committee appointed to nominate officers, reported the following which were unanimously confirmed:

PRESIDENT—Dr. A. H. Stevens, of New York.

VICE-PRESIDENTS—Dr. Samuel Jackson, of Philadelphia; Dr. John C. Warren, of Boston; Dr. Paul F. Eve, of Augusta, Ga. and Dr. Wm. L. Awl, of Columbus, Ohio.

SECRETARIES—Dr. Alfred Stille, of Philadelphia; Dr. H. J. Bowditch, of Boston.

TREASURER—Dr. Isaac Hays, of Philadelphia.

The President, on taking his seat, acknowledged the honor which had been conferred on him.

Dr. Harvey Lindsay, Chairman of the Committee on Obstetrics, read a report on the subject. The report was mainly devoted to the consideration of chloroform, or ether, during parturition, to which, under certain restrictions, the report was decidedly favourable. The report was accepted and ordered to be printed, *with the understanding that the Association thereby expressed no opinion for, or against the opinions advanced in it.*

Dr. Geo. W. Norris, Chairman of the Committee on Surgery, read to the Association an able report on the subject, relative to improvements made in the practice of surgery during the past year. The report of the Committee on another branch, namely, the use of ether and chloroform in alleviating the pain of the patient during surgical operations, was read by Dr. Isaac Parish, of Philadelphia. The report did not decide on the relative merits either of chloroform or ether, but was decidedly favourable to the use of them in difficult and painful cases.

The Chair announced the following as the Committee to memorialize Congress on the subject of the importation of adulterated and spurious

drugs; viz:—Drs. Sprague, of Mass., Cox, of Md., Francis, of N. York, Huston, of Pa., and Carr, of Vermont.

The Convention adjourned until 4 o'clock.

EVENING SESSION.

On motion of Dr. Stewart, the President appointed a committee, consisting of one delegate from each State, to nominate the regular Standing Committees of the Association.

The President announced Dr. Parsons, of R. I., as Chairman of the Committee appointed to memorialize Congress, relative to the importation of spurious and adulterated drugs, in the place of Dr. Sprague, resigned.

The Committee appointed to nominate the Standing Committees were instructed also to report a suitable place for the holding of the next Annual Convention of the Association.

The reading of the reports of the Standing Committees was then resumed, and the report of the Committee on Medical Literature was read by Dr. Oliver W. Holmes, of Boston, Chairman of the Committee. The report embraced a retrospective and connected view and enumeration of the medical journals published in this country; with a synopsis of their most important contents.

The reports of the Committee on Obstetrics and Surgery were then taken up, with a view to a discussion of the merits of the use of chloroform or ether in these departments of medical science.

Dr. Warren, of Boston, spoke strongly in favor of these agents for removing pain, when administered with enlightened caution, and stated the results of some interesting experiments made by himself with an article which he styled chloric-ether, a modification of chloroform and ether, possessing many of the virtues of chloroform, without its dangerous properties.

At the conclusion of the remarks of Dr. Warren, the Association adjourned.

Third day.—The association was called to order at the usual hour, President Stephens in the Chair. The minutes of the last meeting having been read and accepted, Dr. Winne, of Baltimore offered a communication from the Medical Department of the National Institute, in reference to the appointment of a committee on Hygiene.

Dr. Roberts, from the committee of arrangements, reported additional members present. Also presented a statement of the United States Medical Corps, from members of the Navy, which was read. It related to what

ought to be the qualifications of surgeons of the Navy, and was properly referred.

Dr. Cohen, of Baltimore, presented resolutions, complimentary to the surgeons of the Army and Navy, with a recommendation that a representation be made to Congress, and to the heads of the Medical Departments of Navy and War, expressing the gratification of the Association at the position recently assigned to the medical officers of the Navy, &c. The resolutions were adopted unanimously.

The committee to report a place of meeting for the next year, and the standing committees presented the result of their deliberations. They recommend the next place of meeting to be Boston, with a large number of gentlemen as standing committees.

On the question of accepting that part of the report in relation to the place of meeting, considerable discussion arose. It was finally accepted, on the understanding that Cincinnati would be the place of meeting in 1850. The entire report was then accepted.

Dr. Wellford, of Fredericksburgh, Va. from the committee on medical education, read the report from that committee, which was accompanied by a number of resolutions.

On motion, the Association resolved itself into committee of the whole, and proceeded to the discussion of the resolutions, Dr. Knight, of Conn. in the chair.

The discussion was participated in by a large number of members, the principal question being upon the standard of education, and the granting of certificates to students, upon an examination after a first year's course of study. The committee, without coming to a conclusion, on motion of Dr. Stewart, of New York, rose, reported progress, and had leave to sit again.

Dr. Smith, of New York, Chairman of the committee on Practical Medicine, made a statement that he had unfortunately lost his trunk, containing his baggage, and with it the report, on his passage from Philadelphia. Every effort had been made to recover it, but unsuccessfully. He therefore could now but make a sketch of the heads of the report.

A resolution directing the chairman to furnish his report to the committee on publications was passed.

The Association again went into committee of the whole on the resolutions attached to the report on Medical Education, Dr. Knight in the chair. The discussion was an interesting one, and called out the most eminent members of the profession in this country. No two members seemed to

have exactly the same views, on the subject of examination &c. but all seemed to think that some change was perhaps advisable. At two o'clock the committee rose, and the Association adjourned until four o'clock.

AFTERNOON SESSION.

The Association was called to order by the President.

A resolution to refer the communication from surgeons of the Navy to the Committee on Publications, directing it to be published among the proceedings, was offered and adopted.

Dr. Winne presented a resolution for the appointment of a committee of five, to take into consideration the communication of the Medical Department of the National Institute, on the subject of Hygiene, which was adopted and the committee appointed, with instruction to report before the close of the session.

Dr. Parsons, chairman of the committee to whom was referred the matter of memorializing Congress on the subject of the importation of deleterious drugs and chemicals, reported a memorial, which was adopted, with instructions that it be signed by the officers, and forwarded to the Hon. Dr. Thomas O. Edwards, for presentation to Congress.

The President handed in a report of the number of practitioners of medicine, so far as could be ascertained, who were acting without diplomas, which was referred to the committee on publications.

On motion the Association then resolved itself into a committee of the whole, and proceeded to the further discussion of the resolutions attached to the report of the committee on medical education, Dr. Knight in the chair.

The discussion was continued for a considerable time, various substitutes being offered, the last of which, offered by Dr. Thomas, of Baltimore, was adopted. This resolution was to the effect that the faculties of the several colleges be advised and requested to institute, daily or weekly examinations, recapitulatory of previous lectures, and to take such means as will secure the attendance of Students to the close of the term.

On the remaining resolutions, some discussion ensued, but the report was finally adopted, and the committee rose and reported it to the Association.

The report of the committee of the whole was then read, and adopted unanimously.

Dr. Atlee offered a resolution recommending the formation of State Medical Societies, where none now exist, which was adopted.

The committee appointed on the subject of Hygiene, reported in favor of

appointing a committee of twelve on Hygiene, to report next year, which was adopted.

Propositions for the amendment of the constitution were made, and laid over until next year.

Several resolutions were offered and laid on the table.

Dr. Griscom, of N. Y. from the committee, reported in favor of a registration of births and deaths—report accepted, and referred to the committee on publications.

Dr. Power presented a resolution that the report of the committee on Medical Sciences, be referred to the committee on publications, which was adopted.

The resolution to appoint delegates to visit the Provincial and British Association was passed.

The report from the committee on Indigenous Botany, was referred to the committee on publications, and the committee continued for another year.

Several reports from Colleges &c. were referred to the committee on publications.

Dr. G. C. M. Roberts, Chairman of the Committee of Arrangements, submitted a report from which it appeared that the whole number of delegates accredited to the Association, was 477, of which number 277 were present, and the following States were represented, viz: New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, District of Columbia, Virginia, South Carolina, Louisiana, Texas, Georgia, Missouri, Indiana, Illinois, Kentucky, Tennessee, Ohio, and the Medical Corps of the Army and Navy of the United States.

On motion of Dr. Hamilton, the subject of the use of anaesthetic agents in surgery and obstetrics, was referred to the several standing committees with instruction to gather additional testimony in relation to their effects, and the safety or danger in their use. Adjourned.

Fourth day.—The association met this morning at 9 o'clock and was called to order by the President.

The President and Vice Presidents were authorized to appoint twelve delegates to represent the Association in the Provincial and the British Medical Associations of Great Britain.

On motion of Dr. Bouditch, of Boston, the thanks of the Association were tendered to the committee of Arrangements and of Reception, to the Faculties of the University of Maryland and of the Washington Medical

College, and to the members of the profession generally in Baltimore, for the hearty welcome and generous hospitality extended by them to the members of the Association.

The subject of the deleterious effects arising from the extensive consumption of tea and coffee by children and by the laboring classes, was referred on motion of Dr. Jackson, of the University of Pennsylvania, to the Committee on Public Hygiene.

Resolutions tendering the thanks of the Convention to the officers for the impartial discharge of their duties, and to the mayor of the city for courtesies extended, were adopted, and the Convention then adjourned *sine die*.

As the proceedings of the association will be published entire in a few weeks, with the reports of the standing and special committees, we do not deem it proper at present to make any remarks upon its doings, save to say that the meeting was characterized by general good feeling and harmony among the members, and that we have come away from this convention with more complete confidence in the conservative and progressive influence of the American Medical Association than we ever entertained before.

F. H. H.

ART. III.—*Report of Cases in Dr. Hamilton's Surgical Dispensary at the Medical Department of the Buffalo University.*

Saturday March 5th.—Tertiary Syphilis.—Woman, aged about 40. Has had chancres and buboes; does not know whether she was treated with mercury or not; had chancres nearly three years since. Has had ulcers on various parts of the body since, and sore throat; and has now a constant and intense pain in the head, apparently in bones of cranium. *R.*—Iodide of Potash, 3viii; Decoct. of Sarsaparilla ℥iv, of which she is to take a teaspoonful three times a day.

Tertiary Syphilis.—Man, aged about 45. Three years since had chancres and buboes, treated with mercury, was apparently cured. Two years after severe pains commenced in the bottom of one foot and in the top of the head; had extensive ulcers in pharynx and nose, with copious discharges from the latter. Under the care of Dr. King, who gave him iodide of potash, he improved rapidly, and nothing now remains but a slight eruption on head and arms. He was advised to take, for a few days the deuto-iodide of mercury, carrying it to the production of a slight pyralism, and then resume the iodide of potash.

Foreign Syphilis, or scrofula modified by a hereditary taint. Girl aged about 6 years. Has an enlarged knee, ulcers on various parts of the body,

and copper colored spots. She was advised to use tincture of iodine, &c.

Wednesday, March 9—Comminuted Fracture of Clavicle.— — — aged 29 years, was thrown yesterday from the back end of a wagon and fell upon his shoulder ; right clavical is broken at two points, the intercepted piece being about an inch and a half in length and displaced.

It was noticed first, that contrary to the general opinion of surgeons in such fractures, the patient could readily raise his hand to his head, and such in fact is usually the case : and next that by no force or position could the fragments be made to resume their original situation, and the patient was accordingly notified that a deformity was inevitable. Dr. Hamilton discussed the various modes of dressing fractured clavicles, and stated his preference for what is called Fox's apparatus. Yet he admitted that with this he did not generally succeed in fractures occurring in adults in preventing deformity. Nor were other kinds of apparatus more successful, a statement which he confirmed by the following remarks from Velpeau, "with all the bandages imaginable, we cannot prevent oblique fracture of the two internal thirds from leaving a deformity."

The patient was told, however, that he might perhaps find some consolation for his misfortune in the reflection that William III, King of England, died from a broken clavicle, just 147 years to a day (8th day of March 1701) before, this patient broke his collar bone. "If Dr. Budloo, who set it for the King the second time, had lived in this day, he would scarcely have escaped a prosecution for malpractice."

Enlarged Tonsils.—Miss — — — aged 14. Removed by Owen's tonsil instrument. Very slight hæmorrhage.

Saturday, March 12—Stump made by an amputation at radio-carpal articulation. Dr. H. made this amputation a few weeks since, and notwithstanding the fears which most surgeons entertain that amputations made through this and other large joints will not do well, this healed kindly and has left a beautiful and useful stump. The power of pronation and supination exists to a limited extent, and will probably increase. Had the amputation been made through the bones, higher up, this power would have been more completely lost.

A conical stump of femur made by a flap amputation.—The existence of a conical stump, Dr. H. remarked, was not in itself evidence of a bad amputation. It might result from tardy adhesion, violent inflammation, spasmodic retraction of muscles &c.

Several artificial legs, manufactured by Mr. Bodine, of Buffalo, were shown to the class. They were well made, combining the principal excel-

lencies of artificial limbs in an eminent degree, symmetry, freedom of motion and lightness.

Painful Cicatrix.—E. C. aged 52 years, nervous temperament, lost the last phalanx of the thumb of left hand three years since ; was *torn* away. When it was dressed the flaps seemed ample. The wound was closed in three or four weeks, and in the mean time it was not painful.

Five weeks after the accident, a pain suddenly attacked the left shoulder, which was very intense and shot down the arm and hand. Bleeding did not alleviate it, nor was he relieved of the pain until he had taken enormous quantities of belladonna. He thus escaped narrowly from trismus and he has ever since been afflicted with pains and spasms in the arm and hand extending into the cicatrix at the end of the stump. The cicatrix is very tender, and when touched produces a slight spasm of the arm.

He is recommended to submit to an amputation of the stump, since medication would not be likely to succeed, nor would simple incision of the cicatrix, or even destruction of it by the heated iron be as likely to succeed as amputation. A similar case was referred to where Dr. H. had amputated with complete success.

Varus, third degree, of right foot.—In ant child of D. Hoag, of Hamburg, aged four months. Cut tendo achilles and applied a tin shoe.

Wednesday, March 16.—*Epilepsia from fracture of the skull.*— of Buffalo aged about 25 years, was trephined for a fracture of the skull when twelve years old, by Dr. White of Cherry Valley. Has been well until within two or three years, since which time he has had epileptic convulsions frequently.

Epilepsia, from fracture of the skull.—Mr. Whiteham, from Hamburg, aged 35 years. Five years since was hit by a falling tree over the organ of veneration. Fourteen pieces of bone were removed. There is now a large depression at the seat of fracture. Within two or three years he has had epileptic convulsions.

Dr. H. recommended trephining in each case as a *final* resort.

Two cases of *enlargement of the submaxillary gland*, one of which had resulted in the formation of a salivary fistula.

Both to be treated by the use of iodine and by low diet. In the case of the fistula an operation may become necessary.

Goitre.—German girl, aged about twenty. Iodine to be used perseveringly, both internally and externally. She is to have air, exercise and good diet, and to bathe twice a day in cold water.

Encysted Tumor at inner canthus of right eye; size of a walnut. Dr. H. extirpated it; was found to be closely adherent to the outer wall of the lacrimal sac.

Gonorrhœa Virulenta.— —, aged 22 years, contracted the disease about eight weeks since. Not much smarting at present; discharge thick and yellow. Ordered an injection of R—Nitræ argent. gr. i., Aqua pura ℥i, to be used twice a day: also a mixture, R—Balsam Copaib. ℥ii, Spts. Nit. Dulc. ℥iii, Tr. Opii. ℥i, of which he is to take a teaspoonful three times per day.

Hydrocele.— —, aged 64 years from Hamburg. The hydrocele has existed several years; lately it has become painful. Dr. H. advised him first to have the palliative operation made, so that the condition of the testis could be better determined, and after a few weeks, when it again filled up, the radical operation might be made.

It was opened with a common bistoury, and discharged about a pint of straw colored serum. Testis found to be healthy.

Amputation of finger under the influence of chloroform.—B. a sailor, had his left hand and fingers badly crushed by a heavy timber. He was suffering intensely, and Dr. H. administered to him ℥iii of chloroform, sufficient to produce complete insensibility. The patient now turned his head over his shoulder and appeared like a man in a fit of apoplexy; the breathing was stertorous, and the eyes turned up and fixed. The effect passed off however before the operation was quite completed. Dr. H. is not an advocate for the frequent use of anaesthetic agents in surgical operations, and is of opinion that effects like these cannot be produced without hazard to the life of the patient. Wm. W.

ART. IV.—*The History, Diagnosis, and Treatment of the Fevers of the United States*. By ELISHA BARTLETT, M. D., Prof. of the Theory and Practice of Physic in the Medical department of Transylvania University. Philadelphia, Lea & Blanchard, 1847. 8vo. pp. 547.

This work is, in part, a second edition of a publication issued some five or six years ago, which was entitled an essay on Typhoid and Typhus Fevers, being restricted in its scope to the fevers just named. The present publication embraces, not only new matter relating to these fevers, but an account of the periodical fevers of the United States, viz: Intermittent and Remittent fevers, and, also, Yellow Fever. These additions, as the author remarks, entitle the present volume to be considered a new work, rather than a new edition of the first publication, the

size of the former being double that of the latter, and he submits it, in its present shape, as a "systematic and methodical treatise on the fevers of the United States."

It is refreshing in these days of translations, and republications of Foreign productions, to meet with a *bona fide* American book. We may add that it is also a source of comfort to feel assured that an author has not appropriated extracts from an unpublished French treatise, giving an almost literal translation, without credit, or reference to the work upon which the depredation was committed. We do not mean to insinuate that such instances of literary larceny are common, but the remark is not aimless: let those flutter who are conscious of being hit. If we are not deceived by an intensity of desire to see our expectations fulfilled, the fruits of the new spirit which has of late been infused into the medical profession of this country, will be apparent in creditable additions to our national medical literature. Already announcements of several works in preparation have been made from different quarters. Successful examples will stimulate and encourage others, and we venture to predict that it will not be long ere American publishers will find it to be both less acceptable, and less profitable to reproduce foreign works, enlarged and improved by the labors of American editors, than to furnish publications exclusively American. The time will come, we trust, when the sneering question "who reads an American book?" will not be appropriate on our own soil, albeit, this contemptuous remark by a foreign reviewer may express the prevailing sentiment of his own countrymen.

After giving utterance to the foregoing sentiments, it is needless to say that we greet with pleasure the work, the title page of which we have placed at the head of this article.

The previous productions of Prof. B. have secured for him a high position as an author, and contributions from his pen will not fail to receive respectful attention from the medical profession of this country. The present work is not, it is true, strictly an original work; that is to say, it is not made up of personal observations, nor does it profess to offer any new inductions, or novel doctrines. In the language of the author, it "aims at no other excellence, and no higher merit, than that of being a methodical and compendious summary of the actual state of our knowledge upon these most common and important diseases." [Viz. Typhoid and Typhus fevers, preface first edition, retained.] But it is by no means to be regarded in the light of a mere compilation, or a digest of the opinions of others. The actual state of our knowledge of fevers is

not a matter to be determined by mere bibliographical research. It is a task, than which few in the whole range of medical inquiry are more profound and difficult, to determine the actual state of our knowledge of fevers, or, in other words, what doctrines are most consonant with the present condition of medical science. To treat upon this subject requires, in addition to the collection and arrangement of facts to be gathered from various sources, investigation, experience, ratiocination. And in bringing these requisites to bear upon the subject, originality is by no means compromised by availing oneself of the labors of others, or by arriving at conclusions similar to those at which others had already arrived. The doctrines which Prof. B. advocates have, in the main, been before propounded, but the work before us bears sufficient internal evidence that the author is an independent inquirer, thinker and observer, and, as such, it bears the impress of originality, albeit, as respects data and doctrines, it may not have the advantage of priority. While the work is reliable as presenting in a concise, methodical shape the results of the labors of Louis, Gerhard and others, it will also commend itself to the American reader not less, as containing the views of its author.

With these prefatory remarks, we proceed to the first half of the work, viz: the portion treating of Continued Fever. We have, as yet, had time to examine only this portion of the work. We shall not, however, undertake to present an analysis of the portion treating of Typhoid and Typhus fevers. The natural history of these affections could not be condensed within the limits of an analytical review, without doing injustice to the subject. For this we must refer our readers to the work itself. We purpose to confine ourselves chiefly to some of the positions advocated by Prof. B., which are at present matters of controversy, and respecting which we have the misfortune to differ from the able author.

Dr. Bartlett recognizes two species of Continued fever, which he designates *Typhoid* and *Typhus*. The subject of a third species, which is now commonly distinguished as Inflammatory, he dismisses, summarily, with the remark that he has "no knowledge of any such disease." Negative testimony, however, is entitled to little or no weight in opposition to positive testimony by equally competent witnesses as to the existence of a disease, as of any thing else; and with respect to the occurrence of a form of fever characterized by the symptoms which different writers have described as belonging to Inflammatory fever, as it seems to us, the evidence is altogether too important to be thus, we may almost say, flippantly disposed of. A fever to which a term of similar signification

(*Kausos*) was applied, was described by Hippocrates. It was described by Cullen under the denomination of *Synocha*. Dr. Christison, and other late English writers, have applied to it the adjective inflammatory, and German, French, and Italian authors have designated it by terms, which, in their languages, respectively, have a similar signification. The title is objectionable, although it has some signification as descriptive of the distinguishing phenomena. It is objectionable, because it implies that the disease partakes of the essential nature of inflammation, while it is essentially a fever. Whether the form of fever called inflammatory differs in essence, or in its causes, proximate and remote, from the form which the author calls Typhoid, may be doubted; but that a form of fever presented in occasional epidemics, and in sporadic cases, having the traits which are described as belonging to inflammatory fever, rests upon an amount of collective testimony which is not to be turned aside by the declaration of a few observers that they have no knowledge of it. Want of knowledge respecting it may be a sufficient reason for omitting to consider it, but, assuredly, not for implying that it has no existence.

Part First of Dr. Bartlett's treatise is devoted to typhoid fever, and occupies 168 pages of the work. Under the name of typhoid, Dr. B. includes all continued fevers which are not typhus. This is the latitude of signification by which this term is now very generally used. Some, however, [Bigelow & Holmes' edition of Marshall Hall on Diagnosis] apply the term to denote an intermediate grade between typhus and common continued fever. Considered in the former sense, the term is certainly an unfortunate selection. It signifies *typhus-like*, while it is contended that the disease is quite dissimilar, and, indeed, essentially *unlike* typhus. We prefer the more homely phrase, *common continued fever*. In our view, the latter is more appropriate and significant. It expresses, what is really and emphatically true, that it is the form of continued fever which is commonly presented in localities where miasmatic fevers are not predominant—typhus being comparatively unfrequent.

The symptomatology of typhoid fever is concisely, and lucidly presented, occupying about twenty-five pages of the work. The numerical researches of Louis furnish the basis of this descriptive history, as they have to most writers on the subject, since the publication of the admirable treatise on fever by that distinguished pathologist. No stronger testimony of the value of the numerical method, as furnishing symptomatological data, could be adduced, than the fact that writers who differ from Louis on important pathological questions, and are not disposed to eulogize that

method of investigation, nevertheless are ready to adopt the results of the method as applied, in his hands, to the history of fever.

As it seems to us, not the least, if not the most important of the advantages of statistics to the phenomena of diseases, relates to their history and diagnosis. A sufficiently large collection of cases of any disease, faithfully recorded by properly qualified observers, accurately collated, carefully compared as respects each event or symptom of importance, and the results expressed in figures, contains the materials for a descriptive history of that disease the most complete, reliable and available that the present state of science admits of. The history, indeed, might, in this way, be rendered perfect, were it not that diseases at different times and places exhibit different phases, so that a description of any disease which is in all particulars exact as respects the cases investigated, can never continue to be rigidly applicable to the same disease in all localities, and for all time. This consideration is important to be taken into account as qualifying the perpetuity and universality of the results of the numerical analysis of cases occurring at any stated period. It is, perhaps, more applicable to fever than to most other diseases. The same consideration, however, applies with far greater force to descriptions of diseases based upon the prominent events compiled from unrecorded, but merely recollected experience.

The latter are necessarily imperfect, and often incorrect. Compared with a history deduced from numerical analysis, they are like the charcoal sketches of the caricaturist contrasted with finished portraiture by the accomplished limner.

Leaving this digression, and returning to the work before us, we find nothing in the chapter devoted to the symptoms of typhoid fever which suggests critical remark. Our readers are, of course, familiar with the general course of events which appertain to the progress of the disease.

We pass by, also, the third chapter, the subject of which is the anatomical lesions. These we have considered, together with some of the pathological questions therein involved, in a former number of this Journal. [See vol. 8d, Nos. for Dec. and Jan.]

Chapter Third treats of the causes. On this subject the present work is more full than the first edition. The author addressed letters to medical gentlemen residing in different sections of our country, and submits the information contained in their replies, which appear to show that this form of fever prevails more extensively than has been heretofore generally supposed. It is the prevailing fever of the Eastern States, where, for the

most part miasmatic fevers are unknown. But there is reason to think that in the Western, Middle, and Southern States, it has always existed, more or less, intermingled with miasmatic fevers, and very frequently confounded with the latter under the name of bilious remittents.

It is a question of interest and importance, in how far are typhoid fever and remitting fever essentially distinct. Without discussing this question (which the limits and scope of this article do not admit of) we may remark, that we entertain no doubts that the two forms of fever are presented in combination in places where miasmatic influences exist : in other words, that cases occur in which the characters of both are commingled, constituting a hybrid fever, which cannot be assigned readily to either nosological division. We have records of cases of that description, which have fallen under our own observation.

On the subject of contagion, the author does not commit himself. He adduces the opinions of different individuals which are discordant, and thinks further observations are required to settle this mooted question. On this point we would ask what stronger evidence can be desired than the following : A stranger arrives at a small settlement with the symptoms of typhoid fever, which proves fatal. Before his arrival, the persons of the settlement were healthy—no fever has prevailed there—and typhoid fever is not the kind of fever usually met with in that locality. A fortnight after the arrival of the stranger, several persons in the same house are attacked with typhoid fever. Successively, others, residing in houses located nigh at hand, become affected. The disease extends into families, the members of which are brought into contact with the sick ; families which were not in close intercourse with those among whom the disease prevails, escaping. Finally more than one half of the entire population suffer an attack of the fever. This is a brief summary of the facts of an epidemic which occurred in the little settlement of North Boston, near this place, a report of which, by the editor of this Journal, was published in the *American Journal of Sciences*, July, 1845. The population of the settlement consisted of only forty-three souls, and, of these, twenty-eight were affected with the fever, between Oct. 19th and Dec. 7th. This is but a single example, to which we refer, because it happened to come under our notice. Other instances, more or less analagous, have been reported. Assuredly, such facts furnish all the proof of contagion that could be expected to exist. That contagion enters into the ætiology of typhoid fever seems to us clearly established : that it involves contagion

as an exclusive source is another question. Nor does it follow that it is equally contagious at all times and places.

Due regard to space compels us to forego comments on the succeeding chapters in order. We pass at once to the second part of the work, the subject of which is *Typhus Fever*. This part occupies about 130 pages. The point to which the remainder of our remarks must be confined, has given rise, of late years, to much discussion—the *identity of typhoid and typhus fevers*. The author bestows upon this point considerable attention, under the head of *diagnosis* of typhus.

Let us first ask what is really involved in the inquiry whether typhoid and typhus fevers are identical. Do we mean that it is questionable whether there be a propriety in the division of continued fevers into the two forms expressed by the terms Typhus and Typhoid? Whether this be questionable or not, this is not the question which lies at the bottom of the discussion. The true point of issue is this: Is the special affection of Peyer's glands, described by Louis as the "anatomical characteristic" of typhoid, a distinctive mark of that form of fever, as distinguished from typhus? It will serve to disembarass the subject of its apparent perplexity, to appreciate clearly the real source of discrepancy. If it be asked whether there are not grounds for distinguishing certain cases of fever as typhus, from other cases which may be called typhoid, or common continued fever, nearly all practitioners will, at once, reply in the affirmative. The title, typhus, has been used with different degrees of latitude, it is true, by different writers; but it is as old as Hippocrates, and has always been used in somewhat the same sense as now. But after Louis professed to find, as a constant lesion of the fevers of Paris, an affection of Peyer's glands, and subsequent observers in Great Britain, and in this country, found that in some cases of fever this lesion was present, and in others it was absent, the inquiry arose if the presence or absence of this lesion does not afford a fundamental point of distinction between two forms of fever. Dr. Bartlett and others have taken the position that this lesion is invariably present in one form (typhoid,) and that it is invariably absent in typhus. Hence, as we have said, the question now is, not whether there is an intrinsic propriety in calling certain fevers typhus, and others typhoid, common continued, or by some other name; but the question really is, whether an affection of Peyer's glands is a reliable test of the latter, as distinguished from the former. In a previous number of this Journal, [Vol. 3, No. for Jan.] we have endeavored to

show from Louis' own collection of cases, that the lesion of Peyer's glands which he regards as constant and characteristic, is not present in all cases of typhoid fever, and that it is not peculiar to typhoid fever. Observations since the publication of Louis' work have abundantly established that all cases of fever exhibiting during life the phenomena of typhoid fever, do not present, on dissection, this lesion, and, on the other hand, cases exhibiting during life all the characters of typhus fever, may present, in dissection, this lesion. With regard to the latter, (upon which the mooted question turns,) the report of M. H. Landouzy of an epidemic typhus fever which prevailed at Rheims, between Oct. 1839, and April, 1840, furnishes unequivocal evidence. The reader will find a summary of this report in Dr. Bartlett's treatise, in the chapter on the diagnosis of typhus. Here are over one hundred and thirty-eight cases which, beyond all cavil, were cases of typhus, judged by external, living phenomena; while in all the autopsies made, six in number, the intestinal lesions regarded by Louis and others as characteristic of typhoid, were found. Dr. B. admits, in the present edition, that the cases of M. Landouzy throw some doubt on the question whether "typhoid and typhus fevers are clearly and unequivocally, fundamentally distinct diseases;" an admission which is inconsistent with other passages of the work, asserting a fundamental, unequivocal distinction. But we are sorry to see an indication of want of candor in the author's comments on M. Landouzy's report, which should not escape critical notice. Speaking of that epidemic, he uses the following expression, and emphasises it by putting it in italics: "*If entire reliance is to be placed upon the observation of its historian.*" He virtually implies in this expression that there is room for suspicion as to the veracity of M. Landouzy. Does he *know* any grounds for suspicion? If so, he was bound to have stated them fairly and fully. If he has no better reason for the suspicion than that the results compromise the correctness of his own opinions, then the insinuation is ungenerous; nay, it deserves a harsher epithet, which we leave the reader to supply. We regret to observe in other places a disposition to discredit the accuracy of the diagnosis in reports of cases at variance with the position which the author labors to sustain, while there is apparent an equal amount of laxity when the results are favorable to this position. We are far from intending to impute any want of good faith, but it is well known how often and how much the mind becomes warped by the desire to maintain opinions to which it is once fully committed.

We do not of course, profess, in this connection, to discuss at length the question as to the specific distinctions which obtain between typhus and typhoid fevers, in the sense in which they are held by Dr. Bartlett and others. We have only offered some desultory remarks, with the view of placing the question in its right aspect, and furnishing suggestions for the reflections of our readers. We will merely add a few propositions embodying conclusions to which we have been led by our own reflections on the subject :—

1. The internal lesions described by Louis as the “anatomical characteristic” of typhoid fever do not constitute an exclusive trait of a species of fever distinct from typhus. That these lesions are very generally present in cases of fever presenting the train of symptoms described as belonging to typhoid fever, may be admitted. It may also be admitted that they are more rarely present in cases presenting the symptoms characterizing typhus. But they are sometimes present in well marked cases of typhus, i. e. cases in which all the external phenomena of typhus are exhibited.

2. Agreeably to the facts contained in the foregoing proposition, there can be no propriety in instituting these lesions as a sure test of a species of fever distinct from typhus. To do this, and consequently consider all cases in which these lesions are revealed by dissection, to have been cases of typhoid fever, whatever may have been the symptoms during life, must necessarily lead to confusion and error. It involves an obvious *petitio principii*. If these lesions are regarded as constituting an unfailing *post-mortem diagnostic* of typhoid fever, it follows that all fatal cases which present the lesions are cases of typhoid, as a matter of course; but this is obviously begging the question. It seems to us Louis and his followers have fallen into this logical error, and that it may be proved from Louis' own observations that the “anatomical characteristic” was a premature generalization, which subsequent observations have still more conclusively disproved.

3. The divisions of continued fever in the present state of knowledge, are to be based chiefly on differences in external phenomena, in other words the events incident to the febrile career. Analysis and comparison of cases of continued fever, occurring at different periods, and places, will furnish sufficient data for divisions corresponding, for the most part, with those which are generally recognized by writers and practitioners, viz : *Inflammatory*, *Common continued* or *typhoid*, and *Typhus*. The point which we would indicate in this proposition is, that the divisions are to be

based for the present, on facts appertaining to the living body, not on lesions found after death!

4. It seems, of late, to be overlooked, that in the study of different forms of continued fever, we are to take into account their points of resemblance as well as differences, in arriving at an opinion as to the relations which they sustain to each other. This consideration is important with reference to the question whether the different forms are but *varieties* of a single disease, or distinct species of disease—in other words, distinct diseases.

If we place the symptoms of the so-called typhoid and typhus fevers together, being careful to note what particulars appertaining to the febrile state are common to both, as well as what are in contrast, in our opinion we must arrive at the conclusion, that, essentially, they are identical: that is to say, that continued fever is one disease, presented, at different times and places, under modifications which are sufficiently uniform to admit of classification into nosological varieties, but which do not denote distinctions in essence.

We give the foregoing views in an aphoristical form merely for the sake of brevity. The reader will, of course, take them for what they are worth. Each proposition admits of a wide range of discussion, for which we have not at present time, nor space, even were we willing to incur the risk of exhasting the patience of the reader.

In conclusion, we transfer to our columns the following tabular summary, exhibiting the leading points of distinction between typhus and typhoid fever, side by side:—

TYPHOID FEVER.

1. *Mode of Access.*—More generally gradual, insidious, and creeping, than in typhus.

2. *Heat of Skin.*

3. *Mind.*—Delirium and other cerebral symptoms, coming on, and increasing gradually, after the first week, more generally than in typhus.

4. *Bowels.*—Diarrhoea, with thin liquid discharges, very common. Gurgling on pressure over region of cæum. Meteoric distention or rigidity of abdomen. Gripping pains common.

5. *Emaciation.*—More common and greater than in typhus.

TYPHUS FEVER.

1. More frequently sudden and formal than in typhoid fever.

2. More frequently burning and pungent during the early stages, than in typhoid fever. Fuliginous flush of face more common than in typhoid fever.

3. Cerebral symptoms, especially dullness and stupor, more strongly marked at the outset of the disease than in typhoid fever.

4. Spontaneous diarrhoea rare. Discharges from the bowels not liquid. No gurgling on pressure over region of cæcum. Meteoric distention very rare. Gripping pains rare.

5.

TYPHOID FEVER.

6. *Epistaxis*.—More common than in typhus.

7. *Hæmorrhage from the Bowels*.—Quite common.

8. *Cutaneous Eruptions*.—Bright, scanty, rose-colored eruption, slightly elevated above the surrounding skin: readily disappearing on pressure; mostly confined to skin of chest and abdomen.

9. *Eschars*.—More common than in typhus.

10. *Lesions*.—Peyer's glands always altered; generally ulcerated. Mesenteric glands reddened, enlarged and softened. Spleen more frequently enlarged and softened than in typhus. Ulceration of the pharynx and œsophagus more common than in typhus. Large intestines more frequently distended with gas than in typhus.

11. *Causes*.—Confined to no geographical localities. Prevailing constantly and extensively amongst scattered, cleanly, well fed, and well sheltered rural populations. Occasionally and moderately contagious. More frequently sporadic than typhus. More generally limited to the early and middle period of life than typhus.

12. *Duration*.—Average duration somewhat greater than typhus. Prolonged to the fortieth or fiftieth day much more frequently.

13. *Effect of Remedies*.—Bearing depletion better than typhus.

With reference to the foregoing summary, it is to be remarked, that the facts relating to typhoid fever are chiefly those deduced from the numerical observations of Louis. We have already expressed our sense of the high claims which these observations possess. They are doubtless the best our science possesses: but it is to be borne in mind that they are not perfect, inasmuch as the disease is subject to variations. Excellent and complete as they are, it does not follow but that had the number of cases been more numerous; had they occurred at London, or Edinburgh, or New York, instead of at Paris; had the patients been subjected to different methods of treatment, instead of the same method, and had they been private instead of public cases, the results of the analysis would have not been precisely what they are. It is to be remarked, also, that the

TYPHUS FEVER.

6.

7. Very rare. Does it ever occur?

8. In many cases, especially grave ones, more abundant petechial eruption; not disappearing on pressure:—in other cases, no eruption.

9.

10. Peyer's glands, and mesenteric glands healthy. Blood more generally dark and grumous. Dark engorgement of vessels and sinuses of brain more constant than in typhoid fever.

11. Limited to certain geographical localities. Generally confined to crowded, filthy, and poorly ventilated habitations. Under such circumstances eminently contagious. Occurring much more frequently after the thirty-fifth year of life than typhoid fever.

12. Terminating fatally, or in recovery within the first ten days much more frequently than typhoid fever.

13. Requiring more active stimulation than typhoid fever.

symptoms of typhus, in a great measure, are derived from the observations of Gerhard, which are less to be considered as constituting a standard group of symptoms, because they are deduced from the study of a single epidemic.

If the reader, however, will weigh well the points of contrast as presented in the table, rejecting, as he must do, the points of distinction which relate to Peyer's glands, and summing together all the points of resemblance as well as the points of distinction, he will find, as we think, abundant reasons for concurrence in the correctness of the last of the propositions which we have submitted.

We presume it is quite needless to assure the reader that we do not profess in this article to have reviewed Dr. Bartlett's treatise. We were the less called upon to do this, as the portion to which our remarks have been confined, is but a second edition of what has been for some years before the profession. We have availed ourselves of the occasion to indulge in a brief sketch of some of the views which we have been led to form on the subject of Continued fever, the chief design being that they may serve as suggestions for the reflections of those who may honor our desultory remarks by a perusal. We will only add, that we regard the work by Dr. Bartlett as a creditable and valuable contribution to our stock of native productions in medical literature, and we hope it will have an extensive circulation.

ART. V.—*Case of Vaginal Hysterotomy communicated by W. K. Scott M. D.*

About twenty-five years ago, I was called by Dr. Truman B. Hicks, of Warren County, in this State, to visit a patient of his, who had been in labour for more than a week, during which time no traces of the os tincae could be found. She was a healthy country woman who had borne children, and nothing peculiar appeared in the case except the absence of, or our inability to find, the mouth of the womb. The pains had been perfectly regular from the first; when exhausted, she would sleep quietly a short time, and on waking the pains would come on again.

When I first saw her, the pains were regular and strong. On examination I could discover no os tincae, but the uterus during the pains was pressed into the vagina, presenting an elastic tumour, through which, however, the head of the child could not be distinctly felt. On consultation, it was determined to make an opening into the uterus within the vagina, which

I did with a small scalpel guarded by the finger. It was done during a pain, and the opening was large. A gush of blood followed, and Dr. Hicks immediately proceeded to turn the child, which he accomplished in a short time, and safely delivered the patient. The placenta adhered to that portion of the uterus where the mouth is usually situated, and where the opening was made; this accounts for the amount of blood which escaped at first, and induced us to hasten the delivery.

The woman recovered as rapidly as usual, without any unpleasant symptoms, and I believe, has since, borne children. It was reported in the neighbourhood that during her pregnancy she had frequently endeavoured to introduce an iron instrument into the os uteri, for the purpose of producing an abortion. Of the truth of this report I know nothing; but at the time it struck me as the only means of accounting for the obliteration of the mouth of the uterus.

Should this be seen by Dr. Hicks, he will confer a favour upon the profession, by reporting further particulars of the case. As I never saw the patient but once, and that so long ago, I can only remember the most prominent facts.

BUFFALO JUNE 3, 1848

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS

[Communicated for the Boston Medical and Surgical Journal.]

Popliteal Aneurism successfully treated by compression. By J. KNIGHT, M. D. and D. A. TYLER, M. D.

On the 18th of October, 1847, I was consulted, at the request of Dr. D. A. Tyler, of this city, by Henry Johnson, a wood-sawyer about 48 years old, for a tumor in the left ham—the left leg being the limb he uniformly stood upon whilst at his business. The tumor Dr. Tyler considered to be an aneurism of the popliteal artery. For several months he had suffered from pain in the limb, especially below the knee, which the patient thought was rheumatism; and about two months before, had discovered a small tumor in the ham, which pulsated from the beginning, and which, as well as the pain, had been gradually increasing. I found the tumor of such a size as to occupy the whole of the popliteal space, and to press strongly upon the tendons of the flexor muscles, particularly those upon the outside of the limb. The leg, below the knee, was very painful and largely oedematous. All the symptoms of aneurism were so strongly marked as to leave no

doubt concerning the nature of the affection. The action of the artery and the pulsation of the tumor were easily suppressed by very moderate pressure upon the femoral artery, either where it passes over the bone of the pubis or in the groin, or still lower down where it passes under the sartorius muscle. The patient was directed to lie in bed for a few days; and to relieve the severe pain he suffered, laudanum was administered in doses of 30 or 40 drops, and, when necessary, some of the common cathartics. By these means, employed for a week, the cedema of the leg was cured, and the pain very much diminished: indeed, while in bed he was free from pain. The tumor, however, was unchanged in site or character.

We now concluded to attempt a cure by pressure on the femoral artery above the tumor, upon the plan recently practiced by Hotton, Bellingham and others. For this purpose we employed successively all the means which have been described—the hoop tourniquet, the calliper-shaped instrument, the common tourniquet, guarding the limb against the pressure of the strap by encasing it in thick sole leather, and by a variety of other mechanical contrivances. There was no difficulty in controlling the artery, either diminishing its action or suppressing it, by any of the instruments employed. By whatever instruments, however, the pressure was made, however carefully it was guarded, whether continued upon one point only, or shifted from one part of the artery to another, the pain in a short time became so severe that it could not be borne. There was no difference in this respect whether the limb was left uncovered or enveloped in a bandage from the toes upward. The pain was not in the part pressed upon by the instruments, but in the whole limb below, and was felt equally in the thigh, especially, the outside of it, and the leg below the knee. The pain usually began in 25 or 30 minutes after the pressure was applied, and became intolerable in 15 or 20 minutes longer, so that it could not be continued in any instance longer than an hour. These efforts were continued at intervals for 8 or 10 days and, as nothing had been gained by them, were abandoned. Others have met with the same difficulty, and have been compelled to apply a ligature to the artery.

Before resorting to this, I concluded, with the concurrence of Dr. Tyler, to try manual pressure upon the artery. To accomplish this, a sufficient number of assistants was procured from the members of the medical class, who cheerfully offered their services. They were divided into relays—two keeping up the pressure for four or five hours, relieving each other every half hour, and these succeeded by two others, and so on. Sufficient pressure to suppress the pulsations of the tumor was found to be most easily made with the thumb or fingers, without a compress, upon the artery, as it passes over the os pubis; and the directions given to the assistants was to keep up this amount of pressure as nearly continuous as possible. This treatment was commenced at 3, P. M. No pain of consequence was produced by it for five or six hours; and then it was not severe, so that the patient was quieted by one-eighth of a grain of morphia once or twice repeated, and slept for the most part of the night. About eight hours after the pressure was applied, the temperature of the limb was diminished, and it appeared shrunken in size. At 11 o'clock the next morning, 20 hours from the commencement of the treatment, upon removing pressure from the artery, the tumor had diminished very little, if at all, and pulsated about as strongly as ever, but the tibial arteries could not be felt. Probably the blood

had ceased to enter them from the tumor during the night, in consequence of a coagulum forming in the artery where it left the aneurism. Upon examining the parts the next morning, about 40 hours from the commencement of the treatment, the tumor was found nearly one-third smaller in size, firm and unyielding on pressure, and entirely without pulsation. All treatment was discontinued. The femoral artery pulsated with its usual strength in the groin, and distinctly as far as its passage through the tendon of the adductor musclea. Between this point and the tumor, it could not be felt. Several of the anastomosing arteries, especially one upon the inside of the limb, could be felt pulsating strongly and enlarged in size.

From that time to this, a period of five months, no change has taken place in the limb, except that the tumor has gradually diminished in size so as now scarcely to be felt; and the leg, which was at first cold and weak, has nearly regained its natural temperature and strength.

The peculiarity of this case consists in the manner of making the pressure upon the artery, by the hands of assistants instead of mechanical contrivances; and in the slight pain the patient experienced from it. The advantages of this mode of making pressure are such, that I should at once resort to it, if, upon trial, pressure by instruments was found to occasion much pain. It is interesting to look back upon the improvement which has been made in the treatment of aneurism during the past one hundred years. It is but seventy years since the only treatment ordinarily adopted for an external aneurism, consisted in cutting into it, emptying it of its blood, and applying a ligature to the two ends of the artery. The danger of this operation, from inflammation and from secondary hæmorrhage, was such that a large portion of the patients died.

The first and greatest improvement, and that which has led to all the others, was the plan devised, not guessed at, but fairly reasoned out with great sagacity from well-known physiological and pathological laws, by Mr. Hunter, of placing a ligature upon the artery at a distance from the aneurismal tumor. The success of this mode of operating has been so great, that surgeons had almost ceased to look for any improvement on it.

Upon this plan, however, the treatment by pressure is a great improvement. It is so simple, so easily practiced even by those not familiar with surgical operations, and as far as it has been tried, so entirely free from danger, that it well deserves to be employed in all cases to which it is appropriate. The principal objection to this plan, is the pain which it sometimes produces. This is mentioned in the cases which have been stated, as often severe, and, in some, intolerable. This objection is removed, if it should be found, that in other cases, as in the one which I have stated, manual, in the place of instrumental pressure, is so easily borne. One case does not prove that it will be so, but it is sufficient to encourage others to make trial of it. In some cases of aneurism, which are so near to the trunk of the body that pressure cannot be made upon the artery between it and the heart, it may perhaps be made upon the distal side of the tumor with success. If it is so situated that efficient pressure can be made upon the artery beyond the tumor, and before any considerable branch is given off from it, coagulation of the blood will probably take place, and a cure be effected.

The treatment by pressure would seem, also, to be adapted to some cases of traumatic hæmorrhage; those especially where a deeply-seated artery is divided at the bottom of a narrow wound, as in the palm of the hand or the

sole of the foot. The trouble and anxiety which attend such cases, are familiar to every surgeon. In such cases, continuous pressure for a long time would probably not be necessary. It is a well-known fact that arteries, when wounded, bleed in paroxysms at varying intervals, usually of several hours, and that obvious symptoms precede the hæmorrhage. These are, increased heat, pain, and throbbing of the arteries of the part wounded. If, when these symptoms appear, pressure is made upon the arteries above, as upon the brachial artery, when the wounded artery is in the hand, the period of increased action of the vessels of the part and of hæmorrhage may pass by, when the pressure can be removed, to be renewed again with the re-appearance of the symptoms, and continued thus at intervals until the wound in the artery is healed. I make this suggestion for those into whose hands a case of this kind may fall. The trouble to the surgeon, which attends this mode of treatment, is not to be taken into the account when the life of the patient is involved, or when he is to be saved from a severe surgical operation.

NEW HAVEN, APRIL 25, 1848.

From the the Albany Evening Journal.

Births, Marriages and Deaths.

SECRETARY, OFFICE, April 10, 1840.

Dear Sir,—Having just completed the several tables for a report of Births, Marriages, and deaths, to be made to the Legislature, in pursuance of the act of April 28, 1847, in which duty Mr. J. Cuyler was associated with me, I thought it might not be uninteresting to the readers of your paper, to give a few general results gleaned from them. I would, however, remark, that as this is the first report under the law referred to, the reports from the several counties in the State are not as full and complete as could be wished, and unfortunately, owing to an omission in the law, the several cities in the State are, in fact, excluded from its operation, and no reports have, consequently, been received from them, except a partial one from the city of New York. The law makes it a duty of "The Clerks of the several School Districts of this State, organized according to law, and where there shall be no Clerk, or he shall be incapable of acting, the Trustees or one of them, of such District, shall, annually, on or before the 15th day of January in each year, ascertain, from the most accurate means of information in their power, and report in writing to the Town Clerk of the town or one of the Alderman of the ward" &c. There being no Clerks or Trustees of School Districts in the several cities, there were, consequently, no officers, on whom devolved the duty of collecting the information necessary for this report.

Of the whole number of Marriages, 898 were in the month of January; 841 in February; 820 in March; 612 in April; 701 in May; 730 in June; 942 in July; 770 in August; 1,238 in September; 1,354 in October; 1,161 in November; 1,848 in December.

Of the ages of the persons married, 3,888 were under 20 years; 8,383 between 20 and 25; 4,292 between 25 and 30; 1,300 between 30 and 35; 753 between 35 and 40; 415 between 40 and 45; 260 between 45 and

50; 198 between 40 and 55; 113 between 55 and 60; 74 between 60 and 65; 110 between 65 and 70; 8 over 70; 3,841 ages not given.

The greatest number of marriages took place during the months of September, October, November, and December. 8,383 were married between the ages of 20 and 25.

Total number of births from January 1, 1847, to January 1, 1848, 35,897; marriages, 11,437; deaths, 17,263

Of the whole number of births, 2,327 took place in January; 2,501 in February; 3,079 in March; 3,000 in April; 2,974 in May; 2,860 in June; 3,243 in July; 3,370 in August; 3,301 in September; 3,202 in October; 2,910 in November; 3,016 in December; 83 month not given. Of the sex, 18,722 were males; 16,988 females; 187 not given. Of the complexion, 13,155 white males; 16,580 females; 258 black males; 225 females; 695 complexion not given. Of twins there were 15 pair reported; of illegitimate children there were 118 reported.

The greatest number of births took place in the month of August, viz, 3,370; the smallest number in the month of January, 2,357.

Of the whole number of deaths, 1,032 were in the month of January; 1,128 in February; 1,443 in March; 1,327 in April; 1,239 in May; 1,246 in June; 1,447 in July; 1,870 in August; 1,984 in September; 1,623 in October; 1,335 in November; 1,513 in December; 46 month not given.

Of the sex of those dying 8,613 were males; 8,575 were females; 75 sex not given.

Of the complexion of those dying, 8,157 were white males; 8,121 were white females; 190 were black males; 204 were black females; 591 complexion not given.

Of the condition in life of those dying, 3,352 were males married; 2,917 females were married; 5,400 males were unmarried; 4,318 females were unmarried; 1,276 condition in life not given.

The greatest number of deaths took place during the months of August, September, and October.

The ages of those dying were:

	Males.	Females.	Total.
Under 1 year.....	1033	833	1866
1 to 2 years.....	590	584	1174
2 to 5 "	818	723	1541
5 to 10 "	418	407	825
10 to 15 "	211	236	447
15 to 20 "	276	432	708
20 to 25 "	431	537	968
25 to 30 "	390	445	835
30 to 40 "	535	672	1207
40 to 50 "	494	514	1008
50 to 60 "	502	445	947
60 to 70 "	508	503	1011
70 to 80 "	579	546	1124
80 to 90 "	391	294	686
90 to 100 "	89	71	160
100, years and upwards.....	15	12	27
Age not given.....	..	..	755

Of the diseases reported, the following are (amid a multitude of others) the most fatal: Consumption, Dysentery, Inflammation of the Lungs, Dropsy Croup, and Scarlet Fever, of which Consumption is by far the worst.

The average ages of the several occupations of life are as follows: Clergymen, 56 years; Lawyers, 44 do; Physicians, 51 do; Farmers, 57 do. The remainder of the occupations are too numerous, and cannot be stated here, but will be found in full in the reports, when published.

M. L. SCHERMERHORN.

Case of Abscess near the Axilla—Terminating with Profuse Hæmorrhage.—I was requested to see a little girl four years old, with pain in her left arm. The upper third of the arm was very tender, upon pressure, but without any external evidence of inflammation. Upon taking hold of the limb and attempting to move it, the child would scream vehemently. The arm was held near to the side, the fore-arm thrown across the epigastrium, and the shoulder depressed, as in fracture of the collar bone. I could discover no evidence of fracture or dislocation. Rest and saturnine lotions were ordered. In three or four days a little redness appeared about an inch and a half below the axilla, under the arm. Poultices were directed—the child became more pale and wan—laid in its cradle, and took but little nourishment. The whole of the upper part of the limb became inflamed, and at the point where the first spot appeared, it began to soften; fluctuation was very apparent, and I was urged by the mother to open it. This I declined doing, without assigning any reason, and, indeed, without having any, except a disinclination to do so. Soon after leaving the house, I began to reflect, whether I should not have done so, knowing that it would be followed by relief to my little patient. I hesitated, and was almost ready to turn back, to comply with the reasonable request of the mother. On my visit the next morning, the mother accosted me thus: "Doctor, you must lance this place, indeed you must." It was examined thoroughly, and was evidently fit to open. I had left my case at home and could not do it. The child suffered intensely, and the mother had been nearly worn out with twelve days of watching and anxiety. The poultices were continued, and anodynes were administered, and nourishing food directed. In the afternoon I was sent for in great haste. Not being at home at the time, I did not receive the message for an hour after it was left. On my return I went to the little sufferer; she lay pale cold, and nearly pulseless from excessive hæmorrhage. The abscess had broken, and when the discharge occurred, as the mother states, she attempted to raise the arm, and the blood jetted out in a stream, several feet across the room. Pressure was made above the orifice with the finger, the applications all removed, the arm made bare, and covered again with towels wet with cold water. Brandy and chicken broth were administered, but the stomach rejected them. Resort was then had to injections of beef tea, and sinapisms to the extremities. Carb. ammon. in emuls: amygdal: was administered, and retained. The pulse rose a little, and after tone was restored in some measure to the stomach, brandy and water were freely given. I deemed it useless to attempt to secure the artery, as the screams and struggles of the child might have

increased the hæmorrhage, and as the orifice was too small to enter with the tenaculum or needle without a further division. Reliance was placed on the cold affusions, and perfect rest—they were sufficient. By pursuing this plan for several days, re-action was restored, and the patient is now recovering. Much thick and offensive matter was thrown off from the tumor, and continues, to some extent, at this time. The swelling has entirely subsided, and there remains an inability to extend the fore-arm from contraction of the biceps muscle, the radial tendon of which rises distinctly into the bend of the arm, when the extensor muscles attempt to act. The substance of the biceps muscle, and the coats of some one of the important branches of the brachial artery must have been embraced in the sphere of the suppurative action, and suffered a dissolution during its progress, in order to give rise to the results which followed. Had the abscess been penetrated by the lance, the hæmorrhage would, no doubt, have been attributed to its use; and had the patient died, the reflections of the operator must certainly have been very unsatisfactory.—*N. J. Med. and Surg. Rep.*

On the Treatment of Fever by Cold Water.—By WILLIAM GILL, M. D.
Physician to the Nottingham Dispensary, &c.

" [In our last volume, p. 3, the reader will find a communication by Mr. Stallard, of Leicester, upon the efficacy of the external application of cold water as a refrigerant and sudorific in fever; we continue the subject by the following abstract of a paper which was read at the last meeting of the Provincial Medical and Surgical Association.]

Before entering more immediately on the subject of this paper, the author describes concisely the general features of the prevalent fever. In most cases the *immediate* cause of the attack was traceable to sleeping in crowded lodging-houses, the usual abode of fever in large cities, the proximate causes, doubtless, were over-fatigue, and insufficient and unwholesome food. The term "hunger pestilence" has been aptly applied to that disease. A true typhoid gastro-enterite was present in many patients, closely resembling what so frequently is observed in the Parisian hospitals. Whether the essentiality of the fever existed in the condition of the muco-alimentary membrane or not, it was not the author's intention to discuss. This, however, he remarked, that *so soon* as the signs of gastro-alimentary irritation were subdued, the signs of general fever subsided. Some two or three cases, which he read, corroborate this observation. In the generality of patients under his care, not only was the gastro-alimentary membrane affected, but also the muco-pulmonary, as evidenced by cough, shortness of respiration, and frequently universal sonorous râles, affecting the whole of the chest. This was not remarked among the English cases. There was discharge of blood from the inner membranes. Oedema of the lower extremities occurring early in the disease was generally a fatal symptom, though we had two cases of recovery in boys, who were universally anasarcaous from the commencement. The disturbance of the sensorium was marked by a low muttering delirium, sometimes wandering about the bedroom, constant picking at the bedclothes, and subsultus tendinum.

Some were affected with a heavy, comatose, and stupid state, from which they were with difficulty aroused, and when aroused, with difficulty were made to understand questions; they relapsed immediately into the same lethargic condition when left to themselves. This comatose condition often continued till convalescence was established, and in some even later. It seemed a perfect prostration of all mental energy, and was only relieved as the bodily powers regained their tone. In no one case did active delirium occur. The secretions from the bowels, were thin, frequent, and offensive, and often attended with severe griping but no bloody discharges. The function of bladder in one or two individuals was suspended, and it was necessary twice daily to use the catheter. The usual period of the termination of the fever seemed to be from the eighteenth to the twenty-first day, at which time the patients were left in a state of the greatest prostration. When the case terminated fatally, an unrousable, unconscious coma closed the scene. The usual symptoms of fever were generally present—as the hot dry skin, black tongue, urgent thirst, pulse varying from 90 to 130, insomnia, and pains in the head, back, and limbs, &c. After this brief description of the general features of the disease, he proceeds to the treatment.

He remarks that he is well aware that a great prejudice exists in the profession against the treatment to be advocated, partly because it is opposed to preconceived opinions, and chiefly from the unprofessional manner in which it has been ushered into notice. Feeling certain, however, that he was addressing a body of gentlemen willing to receive *truth* for the *sake of itself*, he, with perfect confidence, detailed a treatment of fever as yet untaught in the schools, and generally unrecognised by the profession.

Dr. Currie, of Liverpool, was the first scientific English physician, who enlisted cold water as an external remedial agent in the treatment of fevers. Successful as the practice was under his direction, it has been little followed in later times. It is only within the last few years that the prejudice which existed against the internal and external use of water has begun to subside. "Perhaps," observes the author, "the prominence of the sanitary questions, and the many evils proved to arise from the want of a due supply of pure water, has had much to do in removing this groundless prejudice, and may have produced an undue reaction in its favor, causing it to be considered *not only* as necessary to a healthy condition, but as a *curative agent* of universal efficacy. Hence, perhaps, the public mind has been somewhat prepared to receive the hydropathic theory with much more favour than its intrinsic merits demand. An universal remedy will ever find many advocates, and, in a numerous profession like ours, there are ever men to be found who, from selfish motives, will pander to this diseased taste of the public mind. We, as an association, must ever protest against such exclusive theories as prevail in our days, being in our opinion unscientific, opposed to experience, and calculated to lead to incorrect views respecting the power of many known and valued medicinal agents. In making this protest against any exclusive theory for the cure of diseases we must not rush into the opposite extreme, and, from disbelief of their universal efficacy, deny their particular efficacy, when the touch-stone of experience speaks to the contrary."

The plan the author has adopted for the cure of fever, has been a modification of Dr. Currie's. Instead of pouring buckets of cold water over

the body, he has it enveloped in a wetted sheet, an instrument more effective than Currie's in reducing the temperature of the body, and producing a warm and comfortable perspiration, which did not uniformly follow his plan. The fear of evil consequences from this treatment is groundless. He gives no opinion as to its utility, except in cases of fever. Here, however, he states that he can speak with confidence. When the skin is burning hot, and the mouth and tongue parched, the application of a sheet wrung out of cold water, and applied *closely* to the whole surface of the body, and evaporation prevented by the application of three or four blankets placed over it, produces a most grateful feeling of refreshment, which is soon followed by a more or less warm perspiration. In young people, this perspiration breaks out in from five to ten minutes after its application; in middle-aged persons the period is longer. Many uncomfortable sensations are soon relieved by its use: such as the muscular pains in the back, thighs, and legs, and the sense of aching and weariness; the thirst often becomes less, and even the dry tongue sympathises with the relaxing influence induced on the cutaneous surface. He has seen the low moaning delirium subside whilst under its use; and some patients, who have not slept before, doze, especially if the hair has previously been cut short, and a flannel night-cap wetted with vinegar and water, been applied to the head.

The simple plan he has followed has been this:—On a flock bed he has placed from three to five blankets, superimposed over these, a sheet wrung out of cold water; on which the patient, stripped, is placed, with legs outstretched, and arms to the side; the sheet is then drawn tightly around, up to the neck, and enclosing the feet; first, one blanket, then another, and so on to the whole number, are tightly drawn over the sheet, so as to have the *whole body well and closely packed*. In this state, the patient lies from a quarter of an hour to one or two hours, according to the object in view, and the effect produced. Some get tired at the end of half an hour, some can continue for one or two hours and feel very comfortable. As soon as a gentle perspiration commences, a wineglass full of water is given frequently. At the commencement of this treatment, in a case of fever, he has generally ordered its use for one hour; after that time the wet things are removed, and the sick person is placed in a bed, well wrapped in three blankets, and allowed to perspire for three hours; afterwards, the blankets are to be carefully removed, one at a time, so as to allow the perspiration to subside gradually, and the patient is then placed in bed, between the sheets.

During the whole of this period, small quantities of water, should be given. In the summer, during this process, a free ventilation may be allowed in the chamber, in winter it is necessary to have a good fire, and to have one blanket well warmed, to apply round the body, as soon as removed from the wet sheet.

Several cases of incipient fever have lost all traces of disease after the first application. If the fever be not reduced, the next day the same plan must be repeated, keeping the patient in the wetted sheet from half an hour to one hour, according to the intensity of the symptoms, and in the blankets for one or two hours. This may be repeated every day till indications of a *cool skin* arise, and then it must be immediately discontinued.

During one period of this treatment, the temperature of the atmosphere being very high, (75° to 78° in the shade,) the author has not found it advisable to keep the patient as long as two hours sweating in the blankets;

from half an hour to one hour was sufficient. A longer period caused the pulse to be accelerated instead of lowered, which latter is the usual effect of the treatment. In very hot weather, when a free perspiration has been induced at the commencement of the fever, he has adopted the following plan. To wrap the sick person, for half an hour in the wet sheet, covered lightly with one blanket; to be then washed all over with a towel wetted with tepid water, then rubbed dry, and placed in bed between the sheets. He has not found it necessary to make use of this treatment more than five times to the same individual; generally, after the third or fourth application, the skin becomes cooler, and the other signs of fever gradually subside. When the skin becomes cool, and the tongue less dry, he has instantly discontinued all water remedies, and given bark, wine and broths, and it surprising how soon convalescence and strength became established. During the whole course of the fever, milk and water, or weak broths, were allowed *ad libitum*. In one person, twice in the course of the same day, owing to the intensity of the fever, it was found necessary to repeat the wet sheet, using it the second for only half the period of the first; a comfortable night ensued.

Without doubt this is the most effective mode of *quickly* reducing the temperature of the body; an equilibrium is soon established between the cold of the water and the heat of the body, and the patient becomes bathed in a natural vapour-bath, as may be felt by placing the hand under the bedclothes. Where the fever runs high, and the delirium is violent, the wet sheet may be safely applied for short periods (two minutes,) several times in the course of the day. This will be found a more effectual mode of reducing the cerebral excitement, than any other means with which we are acquainted. This refrigerating plan, used fourteen minutes, during an evening exacerbation, will often produce a few hours' refreshing sleep.

The author confesses that he had, at first, great doubts as to the *safety* of this treatment, where the mucous membranes of the bronchi and gastro-alimentary passages were complicated. Very soon his fears on this head were dissipated by the convincing evidence of experience; in fact, *these* proved the cases in which the decided benefit of the treatment was most marked. The quick and embarrassed respiration, dry cough, and sonorous râles, subsided quickly after one or two applications of the wet sheet; the cough became looser, the râles moister, and expectoration was established.

The same happy change also occurred where the gastro-alimentary membranes were disordered. Generally, the first wet sheet puts a stop to the diarrhoea, and soon afterwards, pain and swelling disappeared. A confined state of the bowels was frequently the effect of the wet sheet, and it was found necessary, in several of the patients, to resort to small doses of castor oil. In three or four cases, the symptoms of gastric and abdominal irritation or inflammation were so violent as to have justified the use of leeches, calomel, and opium: and, indeed, we know that depletion by leeches is the usual treatment followed in the Parisian hospitals, and yet by the simple means mentioned, in three days every bad symptom had vanished. A great saving is made to the patient's strength, when we can dispense with the abstraction of blood.—*Ranking's Abstract.*

On The Action of Medicines, by JAMES BLAKE, M. D., Professor of Anatomy in the St. Louis University.

* In the last two memoirs on the action of medicine, which I published in this journal, I have endeavored to show that the strongest arguments that have been brought forward in the support of supposed sympathetic action of substances, taken into the stomach, or applied to any part of the economy, have been adduced on insufficient data, and that when properly and carefully observed, these very facts that are supposed to support the theory of the sympathetic action of medicines, furnish us with the most striking proofs that it is necessary that they should enter into the blood, before they can produce their effects, and this being the case with that class of agents which has been always held up as the most signally sympathetic in its action, it is but reasonable to suppose that many, if not most of our remedial agents, modify the animal economy by entering into the blood, and that therefore, in the scientific investigation of the action of medicines, a point of the greatest interest is, to endeavor to ascertain the effects produced on the blood, by the substances that are thus mixed with it, and also the changes produced on the tissues of the body by their contact with the substances that are thus brought to them. I would not, however be understood as advocating any special doctrine as regards the action of medicines, or asserting that some do not produce their effects on the animal by a local action they exert on the part to which they are applied, for my experiments, as far as they have been carried, do not at all justify any such deduction, but they certainly tend to point out that the absorption of substances into the blood is a phenomenon that takes with much greater facility, and much more frequently than had been previously imagined. In the present days of reviving humoralism, this fact will probably serve to give an additional impulse to the spirit of exaggeration, that would lead the adopters of these revived notions, to attribute all the morbid phenomena of the animal economy, to changes taking place in the fluids; but whilst at the same time that I believe that a great many of our medicines act when taken into the blood, and through changes produced in that fluid, yet I think the exclusive doctrine of the humoral action of medicines, would be as ridiculous as that which supposes, that when a man sneezes after taking snuff, or has an attack of epilepsy from irritation in any other part of the mucous membrane, that the sneezing and the epilepsy are the result of changes produced in the blood. But to return to the subject of the action of medicine: It is evident from the facts already brought forward in my previous memoirs, that the chief object in my scientific investigation of this point, must lead to an enquiry into the changes produced by the substances in the blood and tissues of the animal economy, with which they are brought into contact. Simple as this problem might at first sight appear, yet, on a closer investigation, it will be found surrounded with difficulties. Could we be contented with mere Empirical knowledge furnished by the observation of the effects produced by our more usual medicinal agents on diseased subjects, it would be an easy task to lay before the profession a vast amount of facts, which however would be but little calculated to command their attention, as they would necessarily be encumbered with all the fallacies inherent to every investigation that is not controlled by the true spirit of scientific research. Unfortunately in the present state of our art,

*See Buffalo Medical Journal, Vol. 3.

the direct application of the results furnished by every scientific course of enquiry on this subject, is not to be looked for. The only path by which we can hope to extend our knowledge as a science is, by gradually proceeding, step by step, from the known to the unknown ; and, although much has been done of late years towards diminishing the immense distance which formerly separated our certain scientific arguments in physiology and pathology, from the complicated phenomena of disease, yet it must not be expected that discoveries in the more purely scientific branches of the science of Biology, can as yet cast but a faint gleam across the wide space which still intervenes between the confines of Physiology as a science, and the point where the data it furnishes can be brought to bear on that most complicated of all its problems—the human organism in a state of disease. The attention that has been given of late years to the purely chemical and physical phenomena of living beings—the extended views that have led the scientific Physiologist to carry his researches through the whole order of living beings, and to attempt to seize the phenomena which are peculiar to them, under the simplest forms in which they present themselves—the light has been thrown by chemistry on many of the reactions which are taking place in the living organisms, have fortunately done much towards removing those barriers which would exclude these reactions from within the pale of our experimental researches. Not only has the day gone by when the scalpel of the anatomist was forbidden to sound the hallowed textures of the human frame, but the moment is at last arrived when the chemist may enter the more sacred sanctuary of the living organism, and with the aid of his reagents, attempt to elucidate the interesting phenomena of which it is the seat. It would be a useless task to attempt to prove that these phenomena are the result of reactions taking place between the elements of which the organism is composed, and which reactions must be themselves due to the composition and properties of the different elements of which it is made up. I think that the belief that such is the case, is very widely diffused amongst the thinking portion of the profession, and in the present day, would scarcely be denied by any physiologist. Admitting, therefore, that such is the case, the primary question which presents itself, in an inquiry into the means of modifying these properties is, what are the reactions which the elements of the living animal present, when brought into contact or submitted to the influence of our various reagents? Simple and self-evident as the question appears, it is astonishing that its solution should, under a scientific point of view, have been attempted by so small a number of those who have occupied themselves in the study of the influence of various agents on the animal economy; for although the question of determining the properties of the elements of a living being is certainly more complicated than that of determining the properties of an inorganic compound, this consideration can afford no reason why we should sit down in despair before the problem as insoluble, and not even apply to its elucidation those means which would immediately present themselves to us if our researches were directed on phenomena less complicated. Had Davy been led to despair of even decomposing the Earths, on account of the difficulty of his task, where would now be the brilliant discoveries which have thrown so much light on chemistry during the last thirty years. The more difficult the task, the more powerful and varied the means he brought to bear on it. The prob-

lems which present themselves to the physiologist are, undoubtedly, far more complicated than those which fell under the observation of the chemist; but this greater complication should only afford stronger incentives for us to apply to their solution all those means which the great advance of the collateral sciences have placed at our command. Of these, the most important are undoubtedly to be derived from an investigation of the reactions which are produced in the living organism, by the various chemical reagents with which it can be brought into contact.

Looking on the living organism, as a whole, we find it, in the higher classes of animals, presenting us with various phenomena, which are, undoubtedly depending on changes constantly taking place in the composition of its elements, or with the forms which they assume.

It is not my intention, in the present paper, to touch on the latter of these subjects. Morphology is already attracting, perhaps, too large a share of attention from physiologists, particularly when it is remembered that it is principally, if not entirely, to the morphological appearances that are present by structures that no longer form a part of the living organism, that their scientific relations are confined, and should subsequent research prove, that the morphological relations of the elements of the blood and tissues, are submitted to as important variations after death, as are the chemical properties of these substances, it will then be found that the great amount of labor that has been expended on this branch of Physiology, must necessarily be less fertile in scientific results, than its almost exclusive cultivation would lead us to expect. As regards the chemical phenomena of which the living organism is the seat, I believe that they present us with a wide and fertile field of research, and one in which the discoveries that are made are likely to throw considerable light on some of the more interesting phenomena of living beings. A clear consideration of the nature of the problem to be solved, at once indicates the means that are to be applied to its solution—we want to discover what are the properties of the fluids and the solids of the animal economy, whilst still forming part of the living organism. Had we the same solids and fluids to deal with, out of the body, we should evidently attempt to discover their chemical properties, by submitting them to various chemical reagents, in the same manner as we should proceed, if we had to investigate an inorganic compound. Unfortunately, however, the animal fluids and solids, when removed from the living body, are no longer the same, or possessed of the same properties, as when forming part of the living fabric, and it is only, therefore, whilst forming part of the living being, that we can hope to be able to ascertain the properties of the elements of which it is composed. What course, therefore, has the physiologist to pursue, in order to arrive at a knowledge of facts that are of such vast importance to him, but to endeavor to bring these different reagents into the veins and arteries of a living animal? This affords a ready means of ascertaining, in what manner the elements of which it is composed, are modified by their contact with these reagents; and, although the visible effects produced in this, as in many other chemical reactions, not directly apparent to our senses, yet we possess in the various functional lesions that are produced, valuable indications of changes, that must, by their delicacy, have otherwise escaped our observation.

As it is from the muscular contractions produced in the legs of a frog by a slight current of electricity, that we possess the most delicate test for the

passage of an electric current, so I believe it will be found, that in the phenomena produced by our various chemical reagents, on living beings, we shall have the most delicate test of the various chemical changes that these reagents produce in the different parts of which they are composed. An example, however, will perhaps better explain my meaning: if it is found, for example, that a single grain of chloride of platinum introduced directly into the blood of an animal, is capable of suddenly arresting the action of the heart, it is evident that this small quantity of our reagent has produced so great a change, either in the properties of the blood, or in those of the tissues of the heart, that this organ is incapable of continuing its functions: and to give another illustration from the same experiment: should it on further inquiry be found that, it is on the blood that this substance acts, we obtain a valuable indication in what direction we are to look for a solution of the important relations that connect the phenomena of muscular irritability, with the composition and properties of the blood. It is probable that no more delicate test of the changes produced by so small a quantity of an apparently inert chemical substance in the whole mass of the blood, could be discovered, than this marked functional disturbance produced in the action of the heart.

Whilst therefore on the one hand, the determination of the changes which are produced in the living organism by our various reagents, are in manner concealed from our view, yet whilst these changes are not carried so far as to destroy life, their existence is indicated by the phenomena they produce on the living organisms, which itself affords a most delicate means of ascertaining their existence.

These considerations will, I trust, be an excuse for my bringing forward in the following pages, a number of facts which have been obtained by direct experimental enquiry of the effects produced by various reagents when introduced directly into the blood of a living animal. Although these facts might not appear to have a direct bearing on the "Action of Medicines," yet, under a general point of view, our medicines are nothing more or less, than means by which we produce certain modifications in the animal economy, and in considering an animal as composed of different elements, on the properties of which elements must be dependent the phenomena, both vital and physical, of which it is the seat, it is evident that it is only by submitting these elements, whilst still forming part of the living animal, to the action of our various reagents, that we can hope to arrive at a knowledge of their properties, and by the laws that govern their reactions. But to return from these general observations, which have already, perhaps, been protracted to too great a length, and which I should not have thought it necessary so much to insist on, were it not that I believe that this branch of experimental philosophy has not attracted that share of attention which it deserves, on account of the true spirit in which it should be pursued not being generally understood, and also that the advantages which its pursuit promises to afford, are not duly appreciated.

There are two points of view under which the experiments I have to bring forward might be related. The first, as regards the chemical relations of the substances employed; the second, as regards their therapeutical properties. As, however, many of the substances experimented with are not such as are commonly used in medicine, I shall notice the action of the substances principally as regards their chemical relation to each other.

It must not be forgotten that these experiments were performed by introducing the substances experimented with directly into the blood, and, therefore, the results they furnish are, in many instances, very different from those which follow the introduction of the same substances into the stomach, and will not, therefore, have in most instances any direct practical bearing on medicine, but I shall, however, endeavor to compare, as far as possible, the effects that have followed this method of administering these substances, with those that are found to be produced by them, when given in the ordinary way; and although some these effects are often directly contrary to what, from our knowledge of the ordinary action of these substances, we might have anticipated, yet, these discrepancies render, I consider, the subject the more interesting, as pointing out a field in which future researches cannot fail to throw much light.

The manner in which the experiments have been performed, is by injecting solutions of the substances used, either into the jugular vein, or into the axillary artery. When this latter method was employed, the tube connected with the syringe was introduced into the artery, with its joint towards the heart, so as to force the fluid into the aorta, and by this means to cause it to be diffused generally through the system, and thus ascertain its effects on the circulation without being brought directly into contact with the heart. The order I propose to follow in relating these experiments, is to consider together the effects produced by the different compounds of the same substance. The advantages of this arrangement will be apparent as we proceed, and will bring together substances, the physiological action of which is analogous. I shall first relate the experiments that have been performed with potass and the salts of this base. The injection into the jugular vein of a dog, of three grains pure potass, dissolved in six drachms of water, was followed by expressions of pain and slight increase in the rapidity of the heart's action, about fourteen seconds after the injection, or at the moment when the blood containing the solution would be circulating over it: the respiratory movements were quicker, and rather laboured; there were also slight tremblings of the muscles, and what might be considered as a spasm. The pressure of the blood in the arterial system was increased, but not to any great extent. The subsequent injection of six grains of the alkali, gave rise to complete paralysis of the heart.

The use of the hemodynamometer, which was connected with the arterial system, permitted me to ascertain the state of the circulation with the greatest accuracy, and it plainly indicated that there was no pulsation of the heart subsequent to twelve seconds after the injection of the salt. The respiratory movements continued pretty regularly, for two minutes after the heart's action had ceased; they then became much slower, but a distinct expansion of the thorax took place three minutes and a quarter after the action of the heart had been arrested. On opening the thorax immediately on the cessation of respiratory movements, the heart was found perfectly still, nor would it contract on the application of stimuli. There appeared to be, however, a slight movement on that part of the surface corresponding to the interventricular septum; this, however, soon ceased. Both cavities were distended with blood—that in the right side was dark and coagulated freely—that in the left side was scarlet, and was coagulated very firmly, more so than I have ever noticed it, for on removing the coagulum from the heart, the clot that filled the aorta, as far as its division into

the ilia, came out with it, although the animal had been dead not more than three minutes.

In another experiment that was made, to ascertain the effects of this substance on the general circulation, independently of its direct influence on the heart, a solution containing four grains, dissolved in about six drachms of water, was injected into the aorta through the axillary artery. In four seconds the pressure in the arterial system became enormously increased, the column of mercury in the hemodynamometer rising as high as fourteen inches. This great increase of pressure in the arteries, must be owing to the presence of the alkali in the blood, rendering its passage through the capillaries, more difficult, and as the heart continued pumping blood into the arterial system, and its exit was at the same time impeded, the accumulation of blood in the arteries was sufficient to produce this great pressure on their parietes. After a few seconds, the increased pressure appeared sufficient to overcome the obstruction, and the blood containing the salt passed on. Ten grains introduced into the aorta, led to the same obstruction to the passage of the blood through the systemic capillaries, but the increased pressure in the arterial system soon overcame it, and the blood containing the alkali was carried on, until it reached the heart, and became circulated over its parietes. This was immediately followed by the cessation of the heart's action, which took place about thirty seconds after the injection had been introduced into the aorta. As regards the general symptoms that follow the introduction of a solution of potass into the veins, they would seem to indicate an action on the nervous system; but, owing to the substance acting so fatally on the irritability of the heart, its effects on the nervous system are not very strongly marked, death always taking place by the local action of the substance on the heart. When injected in small quantities into the blood, there is generally an expression of pain immediately on injection being pushed, and before the substance can have had time to penetrate farther than the right cavities of the heart, for this expression of pain takes place about three or four seconds after the injection of the substance into the veins. Its action on the nervous system is shown by its giving rise to spasmodic contraction of the muscles, which, however, are never carried so far as to interfere to any extent with the respiratory movements. There is nothing like narcotism or loss of sensibility, and in every case in which I have experimented with this substance, death has been caused by its action on the heart.

If we now attempt to analyze the facts furnished by the above experiments, and compare them to the toxicological and therapeutical effects of potass, when taken into the stomach, we shall find one or two interesting facts calling for remark. In the first place, as regards the toxicological effects of this substance, it is extremely probable from its causticity, and from the manner in which it destroys the tissues with which it is brought into contact, that it is rarely absorbed with the blood, at least when taken in the form of a concentrated solution. In all cases of poisoning by this substance, that are recorded, it would appear that death was the result of its local action—and the experiments of Orfila and Bretonneau, who administered it to dogs in large doses, would seem to show that, however large the dose, it never gave rise to symptoms which would lead us to expect that it is absorbed in any quantity into the blood. There can be no doubt but that its action on the tissues of the stomach is such as to disorganize them

to such an extent that circulation is immediately arrested in the part to which it is applied, and thus there remains no channel by which it can find its way into the system. It is not, therefore, surprising that in cases of poisoning with this alkali, we meet with no symptoms that would indicate its presence in the blood. We shall see presently that this is not the case with the carbonates of this base, which not exerting so destructive an action on the animal tissues, are absorbed and show signs of their presence in the blood, by the particular action they exert on the heart. When given in a diluted form, the alkali is best known for its use in certain cases of indigestion, in which acidity of the stomach is a marked symptom. In this case, it probably acts topically, not merely as neutralizing the excess of acid, but also directly on the mucous membrane itself, as a local stimulant, producing effects analogous to those which follow the application of diluted caustics to the mucous membrane of the eye and of the urethra: but there are undoubtedly cases in which it is absorbed into the blood, and in which it produces its therapeutical action in this manner. I allude to those instances in which it modifies the urinary secretion. In these cases, however, its accumulation to a deleterious extent in the blood, is guarded against by its action as a diuretic, so that it is undoubtedly eliminated by the medicines from the blood almost as rapidly as it is absorbed. The alkalies, particularly potash, have been recommended in those cases of inflammation which have a tendency to give rise to the formation of membranous exudations, such as croup. I have no experience as to their effects in these diseases, but the facts brought forward, in the above experiments, show that the theoretical views on which the above practice has been recommended, must be false, for these views are founded on the supposition that these alkalies have a tendency to diminish the plasticity of the blood, and thus counteract the tendency which this fluid has in these cases to pour out a plastic exudation. It is proved, however, that the presence of potash in the blood has an influence directly the opposite of that which has been attributed to it, and we must conclude as far as increased plasticity of the blood is concerned as an element in these diseases, this remedy must be absolutely prejudicial. The physiological effects of the alkali when injected into the veins, present us with one or two striking phenomena. The expression of pain immediately on its introduction into the veins, would seem to show that the parietes of the veins, are supplied with nerves capable of conveying sensations, or, at least, that some such nerves must exist in these vessels, or in the heart. This fact is opposed to the generally received opinion on this point; but, from this as well as from other experiments, I am inclined to believe that the parietes of the blood vessels are supplied with nerves capable of transmitting sensations excited by stimuli. The facility with which the blood containing the alkali passes through the pulmonary capillaries, compared with the obstruction it meets with in the systemic capillaries, is an interesting fact: it furnishes us with a marked example of the influence which the character of the blood may exert in its passage through these vessels, but even does more than this, for it shows that blood possessing certain properties can pass through the capillaries of one organ without producing any obstruction, whilst its passage through the capillaries of another organ, may be almost arrested, or at least greatly impeded. This fact is one which may tend to throw light on the partial changes which pathology teaches are constantly taking place in

the quantity of blood circulating through different organs, and may also elucidate the object of secretion. The action of potass on the heart, gives us a striking proof of the rapidity of the circulation; but to this I have already alluded in a previous article. But we have seen an interesting proof the intimate connection that exists between the composition of the blood and the functions of the organs supplied by it. The presence of so small a quantity as six grains of potass in the blood was sufficient suddenly to destroy the irritability of the heart, and thus to produce death. The opinion of Orfila, as to the cause of death in these cases being due to the coagulation of the blood, is one which is disproved.—*St. Louis Med. Jour.*

Subsidence of Cholera in Europe and Asia.—Intelligence has been received from St. Petersburg up to the date of the 29th January (17th O. S.) The following remarks on the subject of the cholera have been published by Dr. Thielmann, in the *Russian Medical Gazette*.

During the month of December the severe cold so completely arrested the progress of Asiatic cholera, that there was reason to believe it would disappear entirely. It has altogether ceased in the provinces around the Caspian; and with the exception of Moscow, Mohilew, and Witepsk, it is no longer met with in any of the great cities or towns of the empire. Even in these, and in smaller places, the disease has assumed so mild a character, that it appears on the point of extinction.

Letters from Constantinople of the 1st January, announce the gradual disappearance of cholera in that city. The epidemic was then chiefly confined to the Arsenal; and out of 210 attacked only 58 died. Accounts from Bagdad of the 7th December, state that the cholera had almost entirely disappeared from Kerkoula and Souleymania. Letters from Mossol, dated the 12th of December, mention that the cholera had ceased in that city after having killed 300 persons; and intelligence from Aleppo of the 18th states that it had appeared at Beregik, on the banks of the Euphrates, and was causing from ten to fifteen deaths daily.

On the whole, this intelligence is highly favorable.—*London Med. Gaz.*

New Article for Pessary.—We take the following extract from a review in the *Western Lancet*:—

"Many articles may be used as pessaries besides those named by the author. One of the latest we have seen, is an egg-shell—prepared by making a small hole in each extremity of the egg, and blowing out its contents. It is light and smooth, and when well placed with the point looking towards the pubis, answers all the purposes of an "instrument of two inches." Care must be taken to use the shell, not the egg. Inattention to this point has given rise to painful and living results. In one case an egg was introduced into the vagina, and at the end of the usual period of incubation, the patient felt such pointed suffering, that she was induced to remove her "uterine splint," when lo! and behold! there was the bill of a living chick. The practitioner had overlooked the fact that some places, are the best places in the world for hatching."

EDITORIAL DEPARTMENT.

*University of New-York—Medical Department—Annual Announcement
of Lectures—Session 1848-9.*

Our readers are, of course, aware that the National Medical Convention of 1847, recommended the extension of the lecture terms, in Medical Colleges, from four, to six months. At the last meeting of the Association, as we learn, this subject was reconsidered, and it was concluded that, for the present, it was advisable to recommend an extension to five months only. In the mean time, several Colleges had adopted the change so far as to extend their terms to five months.

The University of the City of New-York, in its circular recently issued for the session of 1848-9, takes ground against the propriety of extending the lecture term. We quote the following remarks on that subject:—

“An opinion has obtained in many parts of the country in favor of an increased period of College instruction, and several attempts have been made to bring about that result. In some institutions the number of daily lectures has been reduced, and the time spent in college attendance correspondingly increased. But in this arrangement there are serious evils. Students who come from a distance to attend medical colleges, come with the expectation of devoting their time exclusively to that pursuit. In the majority of cases they are strangers in the cities to which they are temporarily brought. If, after three or four morning hours, spent in the lecture room, they have no further employment for the rest of the day, their time is unduly wasted, and they are put to a needless expense. It is sometimes said that an attendance on six lectures a day is inconsistent with health. Experience shows how illusory the idea is. In almost all colleges not only do the young men attend the prescribed courses, but a majority of them, in addition, voluntarily avail themselves of the private instructions of resident physicians, who receive classes for lectures or examinations. It ought also to be remembered that there is no obligation to graduate at the end of the second course. In this Institution, as in most others, all subsequent courses are without charge, and the student is free to expend as much time in the acquisition of information as he is disposed. Moreover, there is another point of view in which the system of reducing the number of lectures given each day and increasing the time spent in the cities, ought to be regarded by those having an interest in education. To have his time fully occupied is one of the great preservatives of a student from those temptations in which all cities abound. It requires no sagacity to foresee what innumerable evils surround him if he is dismissed with half the day upon his hands. The system of spreading the usual amount of instruction over a long period, is not even an apparent improvement; it is a positive evil; and, whether we regard it as respects expense, or health, or

morals, it is better that a student should attend six lectures a day for four months than four lectures a day for six months."

The arguments of the University in favor of the position it has taken, as the reader will perceive, are based on the supposition that if the lecture term be extended, the number of lectures on each day are necessarily to be reduced. It is true, it has been generally stated as a reason why the term should be extended, that the number of lectures now usually given daily (six) are too many; but it does not follow as a matter of course, that the number of lectures shall be diminished, provided the terms be extended. If it be the deliberate opinion of the University of New-York, that six lectures per day are not too many, they might still extend the term, and continue to have the same number as at present. Conceding all that the University assumes, it will not be denied that a five month's course, of six lectures per day, is worth more than a four month's course; nor will it be contended that each of the departments of medical instruction does not admit, with advantage to the student, of a five month's course, notwithstanding six lectures may be given daily.

The opinion, however, is very generally entertained, as already remarked, that six lectures a day are more than the student can profitably attend to; that the mental ingesta is too great and varied, for healthy digestion to take place. The Faculty of the University of the city of New-York, we suspect, are alone in the position they have taken. Let us briefly examine the considerations which they advance to sustain their position. The first objection to diminishing the number of daily lectures is, that students, coming from a distance, expect to have their time fully occupied with lectures, and, unless they hear, at least, six daily, feel that they do not receive a fair equivalent for their time and money. It might be said in answer to this objection, that the matter is one which should not be left to the student's judgment. It is a matter concerning which the student cannot be expected to judge so correctly as members of the profession, and especially those who have directed their attention to medical education. We do not say that the experience of students is not to be consulted, but that it does not fall within their legislative province. Medical institutions do not consult the wishes of students in other matters, such as the requirements for graduation; why appeal to them in this matter? But, waiving this, is it true that students prefer six daily lectures to a lesser number? So far as our own inquiries go, (and we have devoted some attention to this point) students would much prefer a lesser number. They are sensible that they cannot reap the advantages from six lectures daily, which

they might do from the same number of lectures now constituting a course, distributed over a longer period. The attention becomes fatigued; the succession of so many subjects, following so closely upon each other, involves confusion, and over-tasks the memory; and they have neither time nor strength for reflection, reading, and catechetical exercises, in connection with the lectures. Besides many depend upon the opportunities afforded at the lecture term for dissections, and there are to be added to them other duties. We believe if the question were to be submitted to any class, whether they would hear four or six lectures daily, they would decide upon the former.

The Faculty of the University of the city of New-York, consider the idea that attendance upon six lectures daily is prejudicial to health, to be illusory. We doubt, however, if experience will bear out this assertion. That many are able to endure it, is not evidence that it does not compromise the health in not a few instances. Students often, if not generally, will prefer to sacrifice lectures, rather than sacrifice health, and, accordingly, if their powers of endurance fail, they forego regular attendance upon some branches. But we suspect the history of every lecture term will disclose instances, more or less in number, in which students have felt compelled to leave before the end of the term, on account of impaired health; and that many suffer from application and confinement to the lecture room, is a matter of common observation. If this be not the case at the University of the city New-York, we should incline to the opinion that the students at that Institution are more careful not to compromise health by constant application and attendance, than at other Colleges.

The objection upon which most stress is laid, appears to us the most specious of all. It is, that unless the student is incessantly occupied, he is liable to yield to the temptations surrounding him, and fall into evil indulgences. It is to be hoped that this conveys an unjust reflection upon the character of medical students generally; but, assuredly, they who are not proof against city temptations, will not be restrained by the fact that lectures are given, attendance upon all of which is, by no means, obligatory. Besides, admitting that one or two hours are in this way provided for, where is the security for the eighteen hours still remaining. If students have no better protection against evil indulgences than is afforded by the privilege of attending six lectures daily, their situation it is to be feared, is irremediable! If the experience of the schools in New-York furnish data for such a conclusion, we think our readers will at once agree with us, that it is far better to attend lectures at places where the temptations to evil

doing are fewer than in that city. There is doubtless some force in this consideration. A city of forty or fifty thousand inhabitants supplies, abundantly, material for clinical study, and is far less obnoxious to the dangers of very large cities, like the city of New-York! Individually we have no objection to conceding to the last mentioned objection all the facts upon which it is presumed to be based.

But the medical announcement from which we have quoted, virtually refutes its own positions. Directly following the extract already given, is this paragraph:—"But there is a way in which a real improvement can be effected. It is the plan which has been for years adopted by this Faculty; to leave the long established winter course, with its six daily lectures, untouched, and give, *in addition*, a series of lectures in the month of October *without charge*. To the advantages of this plan the attention of physicians is asked. Commencing with the first Monday in October, and continuing until the introductory of the winter course, lectures are given each day in this Institution. No charge is made, and students, whether they are matriculants or not, are at liberty to attend. This course is wholly separate from the winter course, which is complete in itself. The dissecting rooms are open, and an opportunity afforded of commencing that important branch of duty. The surgical clinique is in operation each Saturday; the obstetric clinique commences to furnish its cases. Advantage may also be taken of an attendance on the various gratuitous institutions in the city, such as the Dispensaries, Eye and Ear Infirmary, &c."

The foregoing is equivalent to a concession that more than a four month's course, of six lectures daily is necessary. The faculty state that to pass a month in New York before the lecture term commences, is a "real improvement." If so, why not make it a part of the regular course at once, and render it obligatory? We are naturally led to inquire what becomes of the equivalent for time and money in this preliminary month! But two or three lectures, we believe, are given daily during this period. Still more, what is to preserve the student's morals all this time! Surely, if six lectures a day are subsequently necessary to protect him against city temptations during the regular course, he is in great danger of being absolutely ruined if he follow the recommendation to pass a month in New-York before lectures commence! We are at a loss to perceive how the two paragraphs we have quoted are to be reconciled. The latter seems to us to involve a concession of the invalidity of the arguments presented in the former.

In making these comments we disclaim any unfriendly feelings toward the Medical Department of the University of the city of New-York. The

extension of the lecture terms in Medical Institutions has been recommended by the American Medical Association, and appears to meet with the general approbation of the profession. We believe the Association and the Profession are right, and we truly regret that the measure does not receive the concurrence of all schools. We are not sure, however, that any Institution, except the University of the city of New-York, has taken decided ground against the measure. Several have already adopted it, and most of those who have not, have signified their willingness to do so, if it is to be generally sustained.

Legal responsibility of discontinuing medical attendance.—A legal case lately occurred in the city of New-York, which involves a point of some interest to the Profession. To compel a Physician, *nolens volens*, to continue his medical attendance in a case from which he wishes to withdraw, would, certainly, be an outrageous invasion of the rights of personal freedom. We can see, however, nothing unreasonable in requiring that he give due notice of his intention to withhold his services. We suspect this is the first instance in which this question has come up for legal adjustment. Now that a precedent is established, such is the itching with some persons to obtain legal redress for supposed medical grievances, it behooves medical men to be on their guard against taking *French leave* of their patients.—We have only to say ‘this is my last visit,’ and the requisition of the law is satisfied. We take the following account of the suit referred to from the *Annalist*:—

“A suit was recently brought in this city against Dr. Peter Pratt, by a patient, who accused him of having abruptly ceased in his attendance after calling a few times, in consequence of which delay the health of the plaintiff was impaired, &c. The gist of the matter seems to be, that the Doctor did not announce to the patient his intention to discontinue his attendance; and the defence was, that the patient had resorted to other medicines than those ordered. The damages were laid at \$5000. In all such cases the patient should undoubtedly be informed of the physicians intention. But we think, that finding his patient intractable and indisposed to follow his directions, and willing to listen rather to the suggestions of his own judgment, or the mischievous advice of ignorant and meddlesome intruders, Dr. Pratt was perfectly justified in withdrawing from the case—was, in fact, bound to do so, and we sincerely hope that every other physician will promptly and unhesitatingly in like cases do the same. The public must be taught a few lessons, and the sooner they are inculcated the better. Physicians *must*, if they would make it respectable, stand up for the dignity of their calling, irrespective of pecuniary considerations. Judge Ulshoeffer’s charge appears to us very sensible and proper, and we recommend it to the attention of

our readers. "A physician, when once employed to attend a patient, cannot afterwards withdraw himself, without giving due notice to the patient, so as the latter might provide himself with another physician; but by giving such notice, he is at liberty to withdraw from his attendance, and the patient cannot maintain an action. If a patient neglects to comply with the directions of his physician, and does not take his prescriptions, the physician may withdraw without subjecting himself to an action at law; and lastly, that if an injury arises to a patient from the combined neglect of himself and his physician, in such case the patient cannot maintain an action." The jury gave the plaintiff a verdict of six cents damages. The facts of the case, we think, should be given authentically to the profession.

Address, Delivered before the State Agricultural Society, Members of the Legislature, and of the Medical Society of the State of New-York, at the Capitol in Albany, February, 1848, on the Food of Plants. By ALEXANDER H. STEVENS, M. D., President of the College of Physicians and Surgeons, and of the Medical Society of the State of New-York, etc.

Agriculture and Medicine hold to each other a near relationship. Both are concerned with principles of Physiology, Pathology, and Therapeutics. The business of the scientific agriculturist is to study and apply those principles which appertain to the vegetable kingdom, as it is the duty of the physician to investigate and practice upon those which belong to the animal creation. A common department of science embraces both, and often the same principles are involved in the phenomena of vegetable and animal life. It is natural, therefore, for the accomplished physician, when his leisure permits, to turn his attention to agricultural pursuits, and he is peculiarly qualified to excel therein. We should infer from a perusal of the interesting address by Dr. Stevens, that the truth of the foregoing remark is verified in him. The object of the writer is to present in a brief popular manner, some of the fundamental principles of agricultural science—principles pertaining to the Food of Plants. He also advances several original views, which show him to be a practical observer, as well as thinker in this attractive and important province of knowledge. The address must be very acceptable to the intelligent members of the class for which it was intended, and is calculated to do good, by directing attention to the scientific study of Agriculture.

Inspection of Drugs.—We are gratified to perceive that, in conformity with the wishes of the American Medical Association, a bill has been introduced into Congress, providing for the inspection of imported drugs, which has passed the lower house, and will probably become a law. If such a law be faithfully carried out by competent

inspectors, something will be done to diminish the quantity of spurious medicines. It remains to provide a remedy against domestic adulterations. We can see no way to remove the evil entirely, but by making the whole business of vending drugs, and putting up prescriptions, a matter of legislation, requiring competent persons only to be engaged in it, and holding them to a strict legal accountability. When this is done, and the system of patent remedies suppressed, we shall be convinced of the verity of progressive civilization.

Medical Department of the University of Buffalo—Commencement.—The second annual commencement of this institution was on the 14th ult.—Degrees were conferred upon thirty two graduates. In the absence of the Chancellor of the University, Hon. Millard Fillmore, the degrees were conferred by Thomas M. Foote, M. D. The honorary degree of M. D. was conferred on Gustavus A. Rogers, of Bath, Steuben county, N. Y., Jeremiah L. Knight, and Jenks S. Sprague.

The charge to the graduates was delivered by Dr. Flint. The exercises were held at the Washington Street Baptist Church. Music by the choir of the church. Prayers by the Rev. Dr. Tucker. Rev. Chas. Rich, and Rev. M. Schuyler. The public attendance on the occasion, as usual, spoke well for the general interest felt by our citizens in the prosperity of the Institution.

Preliminary Medical Education—Regulations of the Buffalo Medical Association.

In conformity with the recommendation of the American Medical Convention, the Buffalo Medical Association, some time since, adopted regulations, with a view to secure proper preliminary qualifications of students received into the offices of its members. The following is the report of the committee appointed to draft additions to the by-laws of the Association on this subject, which was duly adopted. We publish it in order that the members of the Association may bear the regulations in mind, so as to be governed accordingly; and also in the hope that other associations may adopt similar provisions.

Report upon the Requirements of Students.—The Committee appointed at the last meeting of the Association, to "suggest a plan and rules to regulate the members in the admission of students to their offices," respectfully report.

That in order to uniformity of system, it appears to us proper that the State and County Medical Societies should recommend and adopt rules to govern themselves, in the admission of Students to the study of medicine; but in the absence of any such rules or recommendations, we deem the matter of sufficient present importance to demand of us some *temporary* plan for our own guidance. We therefore recommend to the Association the adoption of the following addition to the By-Laws.

§ 13. To be admitted to the offices of any of the members of this Association, as a student of medicine, it shall be required that the applicant shall, in addition to an English Academic education, have made respectable attainments in the Latin language; and that he shall sustain a good moral character. In evidence of which the applicant shall present the certificate provided for by the *fifteenth section* of these by-laws.

§ 14. A Board of Examiners, consisting of three, to be called the "Primary Board," shall be chosen at the Annual Election, by ballot, whose duty it shall be, whenever notified, in writing, by any member, to meet and examine the applicant.

§ 15. If the examination is satisfactory, the applicant shall be furnished with a certificate of the fact, in the following form:

We certify that we have examined A——— B———, of C———, and that he has a good English Academic education. We certify also, that he has produced before us a certificate (or certificates, or an affidavit, as the case may be. An affidavit made before a proper officer, may be secured where, for reasons which may seem satisfactory to the Board, a certificate cannot be obtained,) that he has diligently studied the Latin language during six months, (or, that he is a graduate of a literary college.)

We further certify that he has produced before us, a certificate of good moral character.

Signed by at least two members of the Board.

[Dated]

A———	} <i>Primary Board</i>
B———	
C———	

§ 16. The Board shall, at each regular meeting, furnish to the Association of names of those to whom they have given certificates since the last regular meeting, and the Secretary of the Association shall make a faithful record of the same.

§ 17. The first election of the "Primary Board" shall occur whenever these additional by-laws shall be adopted, and the persons then chosen shall hold their office until the next annual meeting.

All of which is respectfully submitted.

JOSIAH TROWBRIDGE,	} <i>Committee.</i>
W. TREAT,	
F. H. HAMILTON.	

Operation for Fissure of the Soft and Hard Palate, with the Results of twenty four Cases. By J. MASON WARREN, M. D., one of the Surgeons to the Massachusetts General Hospital. Boston: David Clapp, printer. 1848.

This is an interesting memoir, by a gentleman whose experience, in the operations of which he treats, is unusual, and whose success is extraordinary, if not unequalled; since out of twenty-six cases, twenty-three of which were complicated fissure of the hard palate, twenty-five have proved completely successful. Roux, we believe, succeeded with only one out of three.

Dr. Warren's operation is original in several points:

1st. He relieves both the fissure in the soft and hard palate in a single operation.

2d. In cases of wide cleft, he cuts through the posterior pillar of the soft palate, and thus allows the edges to be brought more easily into contact. A similar process was suggested by Ferguson, in 1845, but the cases of Warren had precedence.

3d. The patients are allowed liquid food in the quantity required, by which the sufferings of the patient are not only greatly diminished, but the dryness of the fauces being prevented, the violence of the inflammatory process is greatly abated.

In one case, after cutting the posterior pillar, a troublesome hemorrhage occurred. In all of the cases a small opening remained after the wound had healed at the angle of the fissure, but this was subsequently closed by repeated applications of the nitrate of silver, &c.

In the conclusion of the pamphlet is an appendix on the subject of "early operations for hare-lip," of which he is a strenuous advocate. Dr. H. has repeatedly operated when the child was only twenty-four hours old! He prefers interrupted sutures to pins, and recommends a straight needle.

We commend the pamphlet to our readers.

F. H. H.

Transactions of the Medical Society of the State of New York. Vol. VII, Part II.

The Transactions of the State Society for the present year embrace an address before the society, by Dr. Thomas W. Blatchford, M. D., on the temperaments; *History of the diseases of Saratoga county*, by Dr. Oliver Brisban; address delivered before the Medical Society of the County of Columbia, by Joseph Bates, M. D., on *the influence of the mind on disease*; *observations on agriculture in its bearings on medicine*, by Alexander Thomson M. D.; on *the influence of dress in the production of disease in Females*, read before

the Chenango county Medical Society, by Dr. Wm. D. Purple. They are all interesting and creditable productions.

In the appendix, containing an abstract of the proceedings, we notice the following items:—

“By invitation, Dr. Clarke, of New York, addressed the Society on the subject of fevers, advocating the doctrine of the contagiousness of typhus and ship fevers, and the contagiousness of bilious remittent fevers.”

Among some resolutions accepted and referred to a committee, is the following:—“In the opinion of this society, every Physician who would discharge with fidelity the duties of his high vocation, must necessarily avail himself of some of the principal periodicals, as well as the privilege of frequent association with his brethren of the profession.”

The committees on the subjects of hygiene, Lunatic Asylum, &c., did not report, and were continued.

The code of ethics adopted by the National Convention was adopted as the code of the Society.

The report of the National Medical Convention on the subject of preliminary education was approved, and it was recommended that County Societies act accordingly, (action has already been taken on this subject by the Medical Association of this city.)

The almost unanimous opinion of the members present was, that fevers do not now require or bear bleeding, as in former years.

Dr. Van Buren related a case of croup in which a sponge saturated with sol. nitræ agent was applied “thoroughly to the upper part of the trachea, and adjacent parts!!”

It was resolved that “the identity or non-identity of typhus and typhoid fever, be referred for discussion to the Society at its meeting in 1849.—Also, for discussion at the same time, croup and its kindred affections.”

The following gentlemen were elected honorary members—Drs. Woodbridge Strong, of Boston, Frederick May, Washington city. Dr. Strong is the author of the article on the treatment of typhus fever, of which we gave some account in a recent number of this journal. We trust the honor now conferred upon him may lead him to think more favorably of his professional brethren. Our readers may recollect that in the article referred to he characterised them as *second-rate nurses*.

Vaccine Virus Depot.—The Buffalo Medical Association, at the meeting in June, resolved to establish a vaccine virus depot, and the shop of Mr. J. A. Matthews, apothecary, was by vote of the Society selected as the depot.

The regulations of the depot are contained in the following report of the committee on the subject, adopted by the association, and which we publish by request of the members present at the meeting.

GENTLEMEN:—Your committee, submit the following report, on the subject of Vaccine Virus, for your consideration:—

To us, the best method of preserving vaccine virus in this climate, appears to be, to surround the crust with tissue paper, and then envelope the whole in bees-wax.

We would recommend the following plan, as a good method, if not the best, for securing, to the profession of our city, and perhaps to this region also, a *pure and efficient article in abundance*; viz:

To establish with some druggist of our city a vaccine depot in which may be deposited the best virus, and *that only*, and which shall be under the following regulations:—1st, Physicians may with the druggist you may be pleased to select, deposit crusts to any amount in number, which shall be placed to their credit, at one dollar per crust. 2d. All persons taking virus from the depot, shall be charged by the druggist one dollar per crust. 3d, The money received by the druggist for virus sold, shall be his property as a remuneration for his trouble of conducting the establishment according to your dictation. 4th, Physicians having an account in the vaccine depot, shall not be allowed a transfer of credit from it to any other account they may at any time have with said druggist. 5th, Physicians, depositing virus in the depot, shall, with *every crust*, give to the druggist, the name, age, sex, and constitution of the individual from whom it was taken, the day it came off and *their own names*. 6th, The druggist shall keep a record of every particular thus given, numbering the detailed description of every crust, and placing a like number on the crust described. 7th, The druggist shall give in writing the description thus recorded, to every person purchasing virus, and shall allow no crust to leave the depot, without its accompanying description. 8th, Physicians shall under no *ordinary* circumstances, be allowed, under penalty of a vote of censure from this Society, to supply their brethren of the profession, or any other individuals, with vaccine virus for the purpose of *vaccination*, while there is a supply in the depot.

2 H. M. CONGAR, *Committee*.

 Our readers will perceive a change in the typographical appearance of the Journal. It is printed upon new long primer type, which allows of more matter per page, as well as presents a better appearance. Some delay in issuing the June number has been rendered necessary by this change. We hope soon to make our issues promptly on the first day of each month. For further information respecting the present volume, see circular on the cover.

BUFFALO MEDICAL JOURNAL

AND

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NO. 2.

ORIGINAL COMMUNICATIONS.

ART. I.—*Old Physic and Young Physic; in School and out of School.*
By WM. TREAT, M. D.

(Concluded, from Page 17.)

But we hasten to times near our own, and present in a disjoined way, links to a *New School*, the elements of which, as gathered, warrant for it the name of the *Imaginative School*, as, through the imagination, when strictly adhered to, their agents appear to act.

The celebrated Kenelm Digby, a man of rank and of refined education, leads the van. This English knight was at different periods of his life, an admiral, a theologian, a critic, a metaphysician, a politician, and a disciple of alchemy. During his travels on the continent, he became initiated into the mysterious chemical philosophy of the age, and on his return, published an account of the virtues of the sympathetic powder, the knowledge of which he had obtained from a Monk on the continent.

The SYMPATHETIC POWDER was first tried in England, by a Mr. J. Howel, who had been wounded in a duel. The knight, Digby, was in attendance four days after the wound, and dipped one of Mr. Howel's garters in a solution of the powder, unknown to the patient, who was instantly relieved of the pain, and returned home, leaving the garter to be hung up to dry in the chamber of Sir Kenelm. Soon Mr. Howel sent his servant in great haste, to tell him that his wounds were paining him excessively; the garter was replaced in the solution of the powder, and the patient recovered from his wounds after five or six days of its continued immersion.

King James I., his son Charles I., the Duke of Buckingham then Prime Minister, and all the principal personages of the time were cognizant of the fact. The King being curious to know the secret of this remedy,

Sir Kenelm who revealed it to him; and his majesty succeeded in a surprising manner with it. The King's physician, Dr. Mayenne, was made master of the secret, and carried it to France, where a knowledge of its composition was obtained, not however, until the secret had been repeatedly sold at an enormous price, to distinguished individuals, who tested its wonder-working powers. Testimonials of kings, princes, dukes, knights, and doctors, were not wanting. But the powder proved to be nothing but crystalized blue vitriol in an astrologico-chemical way pounded and mixed. This sympathetic powder was said to have the faculty, if applied to the blood stained garment of a wounded person, to cure his injuries, even though he were at a great distance at the time !

A congener if not contemporaneous, was the famous WEAPON OINTMENT, the wonderful cures of which are attested to by Fabricius, known as Hildanus, a learned surgeon, perhaps the most so of his time, as also by Lord Bacon. This ointment, we ought rather to say these ointments, for there were a variety of receipts known under the general name—Hoplachrisma, (**Oplon*, weapon; *chrisma*, salve,) was used for the healing of wounds, but, instead of being applied to them, the injured part was washed and bandaged, and the weapon or a wooden imitation of it, where the real one could not be had, was carefully anointed with the unguent. Portions of mummy, of human blood, and of moss from the skull of a thief hung in chains, or other substance which addressed the imagination, were favored ingredients. Hildanus could not resist the cry of *facts* and the solemn assertions respecting its efficacy, though tempted to believe that its efficacy consisted in the washing and bandaging the wound, and then letting it alone. Treating of the attested facts, thus he reasons: "As the ointment is applied to the weapon and cannot reach the wound, it follows of necessity that the devil must have a hand in it;" and though he failed in an experiment with the ointment in the case of a lady, who had received a moderate wound, he accounts for it by the devout character of the lady, over whom the devil could have no control!

Lord Bacon says in his Nat. Hist. in so many words, "as yet I am not inclined to believe in it." His remarks, however, upon the asserted facts, show a mixture of wise suspicion and partial belief; but he adds, in conclusion: "Lastly, it will cure a beast as well as a man, which I like best of all the rest, because it subjecteth the matter to an easy trial."

That wizzard of the North, in the third Canto, 22d stanza, of the Lay of the Last Minstrel, alludes to this kind of surgery, in practice by women,

'tis true, as in medicine it appears to be their peculiar province to tread the footsteps of physicians, bearing the urn of tradition, in which is embalmed the ancient and honorable of what was once held nearest and dearest to heart. The stanza reads thus:—

“ But she has ta'en the broken lance,
And wash'd it from the clotted gore,
And salv'd the splinter o'er and o'er.
William of Deloraine, in trance,
Whene'er she turned it round and round,
Twisted as if she gall'd his wound.”

Beaumont and Fletcher, Massinger and others, also allude to this. In the “ Witch of Edmonton ” (iii. sc. 2) Frank says, after the stabbing of his mistress:—

“ This follows now
To heal her wounds by dressing of the weapon.”

The poet-laureat and historiographer to Charles II,—Dryden—who lived in these magical times, alludes to this ointment more than once in his *Tempest*. Thus:—

Ariel—“ When I was chidden by my mighty lord,
For my neglect of young Hippolito,
I went to view his body, and soon found
His soul was but retired, not sallied out:
Then I collected
The best of simples underneath the moon,
The best of balms, and to the wound applied
The healing juice of vulnerary herbs.
His only danger was his loss of blood:
But now he has waked, my lord, and just this hour
He must be dressed again, as I have done it.

Anoint the sword which pierced him, with the weapon salve, and wrap it close from air, till I have time to visit him again.

Miranda enters unwrapping the sword.

Hippolito exclaims, O, my wounds pain me!

Miranda.—I am come to ease you.

(She wipes and anoints the sword)

Does it still grieve you?

Hippolito.—Now methinks there's something

Laid just upon it.

Miranda.—Do you find no ease?

Hippolito.—Yes, yes, upon the sudden all this pain

Is leaving me—sweet heaven, how I am eased.”—*Act. v. s. 2.*

But we are admonished we must leap the ages past and come to the present century. For

“ At every step,
Solemn and slow the shadows blacker fall.”

Oleon, in Massinger's play of the Emperor of the East, (1585-1639) must assist us across the gulf of time, with his parchment-reading, else our leap were too great for our strength.

[Enter *Cleon*, reading the Doctor's parchment, the Doctor waits without.]

"The triumphs of an artisan
O'er all infirmities, made authentical
With the names of princes, kings and emperors,
That were his patients.

—— He swears, within three days
He'll grub up your gout by the roots, and make you able
To march ten leagues a day in complete armor."—iv. 4.

We verily should have believed this were the special herald of the METALLIC TRACTORS, first boon of this century, were there not so many Magi to be proclaimed ere the sands of the first half of the century were numbered.

In 1796, from that slandered State which is said to manufacture much that is wooden, there was put forth by one Dr. Elisha Perkins, of Norwich, two metallic cones, one apparently of brass the other of iron, sum total in value, a York shilling, but by account of their peculiar virtues, as a special favor, sold to clergymen and some others for *five* guineas. Our trumpeter Cleon has "opened the ball" with reference to the efficacy of something, perhaps of these. In 1798 they have crossed the ocean to Great Britain, and the printing press there, as was the case here, has marshaled its forces in squares and columns, to greet and commend this great discoverer of the age. Aye, these Tractors are already employed in the royal hospital in Copenhagen. The Danish physicians have published of their success in a respectable octavo volume. In 1804 the Perkinian Institute is founded in London, and the Perkinian Society has public dinners at the Crown and Anchor—a poet-laureate who had invested capital for one-fifth of the patent, will soon write his "Terrible Tractoration," proving the excitement of his mind upon the subject, if naught beside.

Dr. Fuller, of London, advised every family to keep the Tractors in their houses, as a cure-all, "without the expense or danger attendant upon common medical practice." The Royal College of Physicians has accepted a pair of the Tractors, also a copy of the book of facts, voted thanks, and laid them upon the shelf without troubling themselves to investigate their properties. But why heed that?—the Perkinian Institute is founded, Lord Rivers is elected President, and eleven worthies Vice Presidents, among whom is Governor, son of Dr. Franklin.

Lord Henniker, a member of the Royal Society, who bears the reputation of a man of judgment and talents, has condescended to patronize, and has bought three pairs of the Tractors. Besides the Chaplain of the Earl of Dunmore, also of the Prince of Wales have commended them. What matters it then, that of American certificates, among the honorable, we find 34 physicians and surgeons, thirteen clergymen, most of whom are doctors of divinity, one professor of natural philosophy in a college, and two members of congress. The mass of Facts as to cures wrought, are before us, hear the report of the Perkinsian Committee:—

“The cases published [in Great Britain] amounted, in March last, to about 5000; suppose only one in every 300 of cases have been published, (and the proportion is probably much greater) it will be seen that the number to March last, will have exceeded 1,500,000!”

We trust with this amount of attested cures, and all of them belong to the class of facts with which medical literature and street talk abounds, no one of my auditors will be found skeptical. Were it thought probable we would summon, (as was done by the Perkinsian Institute) “the injured ghosts of Harvey, Galileo and Copernicus to shame them.” True the Baillies and Heberdeens—men whose names have come down as synonymous with honor and wisdom, bore reproaches and left them to their fate, as has been done with Magnetism and Homœopathy of the present day. But some others, believing the whole to be a delusion, essayed a test. Dr. Haygarth, of Bath, tried tractors of his own invention on patients with different complaints, and they operated as well as the five guinea ones, so long as the patients believed them to be genuine. His were made of lead, wood, nails, pieces of bone, slate pencil, and even stems of tobacco pipes. Dr. Alderson employed sham tractors, made of wood, and produced such effects on five patients, that they returned solemn thanks in church for their cure. Ann Hill’s case may serve as a type of the whole:—She had suffered for some months from pain in the right arm and shoulder. The (wooden) tractors were applied in the usual way, by drawing them over the afflicted part very lightly. In the space of five minutes she expressed herself relieved in the following apostrophe: “Bless me! why, who would have thought it, that them little things could pull the pain from one? Well, to be sure, the longer one lives, the more one sees.” As many now urge of other fancies if one gets cured, what matters it how? Their poet-laureat so sang:—

“What though the *causes* may not be explained,
Since these *effects* are duly ascertained,
Let not self-interest, prejudice and pride,
Induce mankind to set the means aside.”

These magnetic tractors though wonder-working (composed of whatever inorganic substance from brass to a pipe stem) were wanting in one class of phenomena to ally them with mesmerism, somnambulism and clairvoyance—it was reserved for the digital points of the human hand or that spherical orb, the leering eye, to accomplish that spell which Massinger's counterfeit Roman Actor had previously enacted: Hear him:

Æscopus.—Is he not dead?

Paris.—Long since to all good actions.

You may with safety prick him,
Or under his nails stick needles, yet he starts not.

———We must use

Some means to rouse the sleeping faculties
Of his mind, there lies the lethargy. Take a trumpet,
And blow it into his ears; 'tis to no purpose,
The roaring noise of thunder cannot wake him
And yet despair not; I have one trick left yet.

I will cause a fearful dream
To steal into his fancy, and disturb it
With the horror it brings with it, and so free
His bodily organs.

Domitianus Cesar.—'Tis a cunning fellow,

If he were indeed a doctor, as the play says;
He should be sworn my servant, govern my slumbers,
And minister to me waking."—*Act. ii, Scene 1.*

The chief difference between the poet's player two centuries ago, and the public believer at this time is, the first substitutes an "if he were indeed a doctor as the play says"—and the latter makes him one, by mere force of the will, and then we have enacted as may be read in Deleuze's book, which we are told is best authority on magnetism—of an eye destroyed by small-pox, restored; (p. 149) of a leg six inches short and a callosity as big as the fist, in six weeks the callosity is reduced one half and the leg made three inches longer, facts of course, and well vouched for! (p. 153)

But here we must enter up our protest to farther exhibitions as recorded page 251, of souls making long journies of knight errantry and leaving their bodies behind, apprehensive as we are, that as fared it in an instance cited by Pliny, it may happen to others,—the ghost went out, and the body being destroyed before its return it could not get a habitation, a loss not made up to science until this our day, and bearing a caution with it, as without care much loss might again accrue to science! For many wonders we trust have yet to be revealed, and useful ends attained, besides those related of trees mesmerised, whereto lady visitors in the garden were attracted and spell-bound. (p. 230-31) Orchards might thus be protected from robbery.

In mechanic arts it would be useful to reveal disordered mechanism—in trade, quality and fitting prices of sugar and tea—prices current abroad, or prospective crops, and then the mere trifles of health and ministry of potent medicine will be left perhaps to those triflers whose time and thoughts tend to nothing else! Or, relying upon present revelations by Deleuze, a pitcher of magnetised water shall cure all diseases. Crudities, as well as wheat bread, and water shall be given to crying children who while under the operation shall declare as do the adults he names, the one is cake, the other wine or whatsoever is willed as it is willed by the magnetiser and the pitcher of precious fluid. (p. 355.) But alas! while we somnambulise

“Dear lost delusion! Truth’s too fervent ray,
Strikes thy bright frost-work, and it melts away.”

Not however without leaving its fantastic fret-work to be interwoven with real science for private fraud and speculation.

Of HYDROPATHY we have time but for one or two remarks. If no benefit is here derived from the journey to a special place, often invigorated with mountain air, regular habits, gentle exercise and attendant diet, then must be attributed cures to the means which Cardon teaches thus: “Tis opinion which makes or mars physicians; and he doth the most cures, (according to Hippocrates) whom most trust.” Cardon has claims to be heard on this subject, for he lived centuries anterior to our time and Burton in his *Anatomy of Melancholy*, says: “Cardon cracks that he can cure all diseases with water alone as Hippocrates did most diseases with Hellebore alone.” (p. 439.) This verifies that old adage:

“There is nothing so new as that which is forgot.”

In keeping with Culpepper’s *Herbal* we have that of William Salmon, printed about 1690, titled *New London Dispensatory*, the plants enumerated have virtues similar. We take it up now for the purpose of citing a few animal remedies. Here we read again of the moss from a dead man’s skull as an ingredient to a magnetic powder, (p. 77); of amulets hung about the neck or the ears, the elk’s hoof for instance inclosed in a ring, or beetle-bugs; of hair and nails from the patient cut fine and put in a hole bored in an oak or plum tree and plugged in, or, given to birds in a roasted egg—or mixed with wax and stuck to a live crab, perhaps the soldier crab, casting the animal into the river again, curing consumption, (p. 190); of artificial mummy, when real is not to be had, made from the carcass of a young man, (some say red-haired) not dying of a disease, but killed; mixed with aloes, myrrh, and spirits of turpentine and dried in a shady place; this dissolves blood, helps coughs and cures wounds. Spirit of man’s brains—

Lamb's grease with jelly of vipera, (p.197)—Chameleon's liver to dissolve love—Ram's brains and honey to cause children to breed their teeth easily, (p.198)—or dog's teeth calcined and so mixed; of oil of bricks; a quintessence, an ingredient of which is the left hind foot of an elk, rasped. (p.509.)

Of the *aqua divina*, toe divine water, made thus: The whole carcass of a man violently killed, cut in pieces and distilled twice or thrice in a retort. It is reputed to have a magnetic power. We are gravely told, if to a teaspoonful of this water, you put a few drops of the blood of a sick person, and set them on the fire and they mix, the sick recovers, if not, the sick dies for want of blood, (p.195.)

If authority were wanting confirmatory of the prevalence of such practice and its test by centuries of experience, (and men of more note) we might have selected the most of these from an old London Dispensatory 1618; or from John James Manget's ponderous Latin folio, 1703. The latter work, aside from this, is really of much science for its day.

These treat of oil from swallows, worms, millipedes, frogs, scorpions, &c. Let two recipes suffice:

R. Vipera, living, large and fat, No. iii; Spanish wine, ℥ii; St. John's Wort ℥viii—express and evaporate. It cures gout, leprosy and other diseases of the skin. The preparation to be made if possible when the sun enters the sign Scorpio or Cancer. (Manget, p. 463, also p. 481-2.)

For tooth-ache, put powdered worms into the cavity.

Here we are reminded we have quite overlooked another out-of-school practice which has held rule with the multitude for centuries and has strong affinities with the decidedly foremost of our own time. We allude to the doctrine of SIGNATURES, applicable to mineral, vegetable and animal remedies. This mode sets out with resemblances of the medicaments, fancied or real, acting, when taken, as curative to the parts which they are supposed to resemble—for instance, if a leaf be heart or liver shaped it shall cure the like. "Walnuts are said to have the perfect signature of the head; the outer husk or green covering represents the pericranium, or outer skin of the skull, whereon the hair groweth, this is good for wounds of the head. The woody shell has the signature of the skull, the little yellow skin or peel, that of the dura or pia mater, which are the thin scarfs which envelope the brain. The kernel has the very figure of the brain, and therefore is profitable for the brain."

Of animal medical agents: The stronger the animal the better the remedy. Extract of man's skull cures most of the diseases of the head.

A quintessence made from man's flesh is a universal remedy, S. 407; Heart of a Hyena helps palpitation of the heart; Lion's flesh helps the palsy—and every part of this animal as also of the Wolf is of efficacy in the diseases of like parts of man. Powdered worms taken expel worms—this remedy coming down by tradition we have met in actual practice among old lady traditionalists in this city! Dog's liver, especially that of a mad dog, dried, powdered, and taken, cures the bite of a mad dog. (p.202) An ointment of hair-ashes, distilled with honey makes hair grow, S. 189: for "The Linimentum Ischiadum"—hip liniment, we read from Manget p.176, R. Canes novissime natos, et Talpas viventes, cum Lumbricores terrest, etc.; that is, take new born puppies and living moles, and earth worms—add red wine and goose grease, make a liniment to rub the parts. While Salmon says: The heart of an Ape, a teaspoonful, dried and drank in powder strengthens the heart and increases boldness—a mode by which we almost imperceptibly approach—

HOMŒOPATHY.—The hint of the similarity of this doctrine to that of signatures, we have from Menzel's history of German literature, Menzel himself being a *dilettante* of the Homœopathic school. Our friends of this school certainly will not object to our thus approaching the subject hand in hand with one so distinguished among the German literati, with Manget a German king's physician, bearing some "similia" in fore-front, when they themselves boast for its modern phase, German extraction—the founder Saml Hahnemann,—and of modern German princes as its especial patrons.

We under these advantages however, approach this to us unsolved riddle with not a little caution. Here we are conversing of dogmas held by our neighbors, among whom we number many of our best friends, whose honest opinions we would treat kindly if for no other reason, for their kindness manifested towards us, how absurd soever the dogmas to which they tenaciously cleave may appear. To treat the subject gravely we shall find much difficulty, but as it has fallen into the meshes of our discourse, at this point, we must needs with our lance run a tilt with it, as our time will not suffice, at this hour, to venture upon a minute dissection.

We have called Homœopathy an unsolved riddle and we do it notwithstanding reflection:—for as taught by Hahnemann it affirms that an infinitesimal quantity of matter is more potent to kill and more potent to heal than its greater:—that this matter thus rendered potent, cures or kills by its similitude, acting as cause or effect, *similia similibus curantur*, that which causes, or its like, cures, is the pass-word, the *open sesame* to this new school. Once entered if we follow its founder we have soon started another hypothesis,

(the discovery of either one of which, if true, would be fame enough for any one man) that at least seven-eighths of all chronic diseases originate from itch.

Though in the outset we resolved to be grave, we confess one does feel a slight infinitesimal tickling at the mid-riff, by operation of so potent an agency as that strong infinitesimal, *mental conception of its causative*, but with this *fact*, this experience alone tending to our conversion, at present we should be unwilling to encounter the fully engendered disease without privilege of actual scratching—for such a disease when really present is not to be laughed off! One other feature in this riddle, though not laid down by Hahnemann, to be observed in all their *materia medica* is this, that these *similia*, causing and curing disease, each have an antidote affixed, which is not the first *similia*, but is pressed into service to counteract the first *similia*. Obviously the reception of such antidotes is a denial in practice of the Hahnemannic theory! These *similia* are cured by *contraria*, or the word antidote in this connection conveys no meaning to us. But we do not press this, each of these doctrines have been set aside by schismatics who rank as Homœopathists. But, this was the Homœopathy of Hahnemann, and such it was a few years ago, when curiosity led us to an examination of its tenets. Recently we have re-examined it, and it is but fair that we give its newly acquired features.

The itch dogma, though Hahnemann declares it was a labor of 12 years to inoculate it in, has by his professed followers and leaders too, been pretty effectually scratched out. The German section of the faithful have gone farther and insist upon a little more potency, not infinitesimal, but Eclectic potency, for acute diseases, as also do many Americans. Another phalanx march forth, and a pretty large majority this, with banner unfurled, repudiating that part of the original doctrine which affirms *similia similibus curantur*, in so far as it teaches that the medical cause may by improper or unskillful use beget a new, yet similar disease,—the excess of potency first killing out, as originally taught, the little whelp of a disease and substituting the potent roaring lion, uncaged like the seven plagues from the unsealed apocryphal vial—unconfined from the sugar-coat of mail!

Do we here mistake? Let us quote from the Organon, there we read “Homœopathy cures, by opposing to the natural disease an artificial one as similar to it as possible, and sufficiently intense to extinguish it by its predominance. If the factitious disease were weaker than the natural it would remove the latter only in part; if it were stronger, it would no doubt cause it to disappear altogether, but it would leave in its place an artificial disease

extremely similar as to symptoms." These doses to be so nicely adjusted let it be remembered are little pellets moistened in the mingled waves of one million lakes two miles in circumference, in which has been blended one drop of Tincture of Chamomile as is given the dose IVth degree Jahr's Manual—though Hull in his translation has omitted to state this dose—other doses there are which are given in the Xth or even higher degrees of attenuation! The difference between the weapon ointment and one of these dilutions of medicine is said to consist in this: "The one is an infinite dilution of the common distance at which it is applied—the other an infinite dilution of the common dose, in which the remedies are given."

It will be observed that the crowning *similia* in the riddle of this school with its three several divisions is:—That conjoinedly they affirm *all*, and singly they deny *all* the teachings of Hahnemann, thus by their individualities, they dig and undermine Homœopathy to its very foundation and chief corner stones!

We designed to speak of the mode of conducting the boasted experiments of Hahnemann,—of the almost utter impossibility of making an attenuated dose which even in the 10th degree of potency consists of the 100th part of the millionth, of the millionth, (this numeral ten times repeated,) of a grain of an oyster shell. Let this one instance suffice of his mode of conducting his boasted experiments copied from the 213th page of Hahnemann's Treatise on Chronic Diseases:—"After dinner, disposition to sleep; the patient winks." Nine days after taking the remedy, again he adds: "After dinner, prostration and feeling of weakness."

The remedy was oyster shell prescribed in fractions of the sextillionth or decillionth degree. The action of a single dose of the size mentioned, according to Hahnemann, does not fully display itself in some cases, until 24 or even 30 days after it is taken, and in such instances has not exhausted its good effects until towards the fortieth or fiftieth day—before which time it would be absurd and injurious to administer a new remedy!

These doses we are also informed may be rendered inoperative by the presence in a room of aroma, even Cologne water. Gunther in his treatise on diseases of horses adds that homœopathic treated horses should not even stand beside horses that have taken allopathic medicine—though cologne is so antagonistical—the perfumery of a stable is not suggested as an inconvenience! Yet chemically this, as also the secretions of man, or animal, would neutralize most of *such* doses before they could even reach the stomach.

But of Homœopathy this must suffice, when we add there is not in our knowledge a single practicing physician who is of this school! We say it fearlessly, let Hahnemann be judge and exponent to him who affirms the contrary! When we hear of sensible effects from reputed homœopathic doses it will be well to bear this in mind—elsewhere we cannot answer for them.

In the school which we have ventured to name the Imaginative, we trace germs of the *archeus* of Van Helmont, as also of the *anima* of Stahl, which we cannot now stop to define; and why need we? Chaucer, the father of English poetry, long since wrote

“Men, by their nature, love new-fangledness
As do the birds that men in cages feed.”

To batter down one set only makes way for another; therefore retaining our equanimity, we can only say of these, in language of Chapman:

“——— this wind, that doth ring so in your ears,
I know is no disease bred in yourself,
But whispered in by others, who in swelling
Your veins with empty hopes of much, yet able
To perform nothing, are like shallow streams,
That make themselves so many heavens to sight,
Since you may see in them the moon and stars,
The blue space of the air,—(as far from us,
To our weak senses,) in those shallow streams,
As if they were as deep as heaven is high;
Yet, with your middle finger only sound them,
And you shall pierce them to the very earth.”—*Byron's Conspiracy.*

Sir Walter Raleigh having witnessed a quarrel from his study window, which took place in the court-yard below, was so disconcerted at the conflicting testimony of other observers, is said to have burned the manuscript of a work which he had been engaged in writing, containing his observations made on the various countries in which he had travelled, doubting the accuracy of his own eyes:—A process similar to this no doubt has tempted many first to falter, then to fall from belief in remedia lacyency of medicine.

Pliny tells us that in Rome physicians were banished for six centuries—and it may be gathered from Livy with what effect when he tells us, to stay the ravages of the plague the Syballine leaves were consulted—the public games instituted—the god *Æsculapius* in form of a serpent imported, and finally the plague is arrested by Augustus Cæsar's driving a nail! Livy himself expresses no doubt of their efficacy. Had we not the history of such an attempt centuries before—and were we so mentally constituted

as a Raleigh, we know of no doctrine so attractive as that of the infinitesimal dose.

Often are we puzzled to know what to receive on testimony and now, while reflecting on the law of evidence, we were moved to refer to the printed Report of the trial of witches, 10th of March 1664, before the

“Immortal Hale,—for deep discernment praised,
And sound integrity—not more than famed
For sanctity of manners undefiled.”

To this the writer of the preface adds: “the trial was held before a judge, who for his integrity, learning and law, hardly any age, either before or since, could parallel,—who not only took a great deal of pains, and spent much time in this trial himself, but had the assistance and opinions of several other very eminent and learned persons.” The evidence is taken and summed up:—the judge charged the jury

“That there were such creatures as witches, I make no doubt at all! For 1st, The *scriptures* hath affirmed so much. 2d, The *wisdom* of all nations had provided laws against such persons.”

How could a jury do otherwise than find a verdict of guilty, when revelation and reason and the judge were agreed! We read in connection, “Dorothy Durent had been on crutches three years, but when the jury brought in the verdict of guilty against Amy Duny, now a convicted witch, to the great admiration of all present, she was restored to the use of her limbs, and went home from the court without crutches!”

The next morning those afflicted came to the Lord Chief Baron Hale’s lodging, all spake perfectly, and in good health, though dumb before! Testimony upon medical subjects and reputed cures after this may well confound the ignorant when published in pamphlets or newspapers.

The judge might have saved his reputation here, perhaps, had he been previously in possession of a recipe current in his time. As it may be of service to other judges of law, who prate upon medicine, we help them to it.

Bartholomus Carrichters, in his *Secret*, b. 2. c. 12, published a recipe which is mightily commended by Hector Schlands, in an epistle to his learned friend Gregorius Horstius; see Horstii Epist. Medic i, §7. 1612. “R. Dogs’ grease well dissolved and cleansed ℥iv; Bears’ grease ℥viii; Capons’ grease ℥xxiv; three trunks of the misletoe of hazle, while green, cut it in pieces and pound it small till it becomes moist; bruise it together and mix all in a phial. After you have exposed it to the sun for nine weeks, you shall extract a green ointment wherewith if you anoint the bodies of the bewitched, especially the parts most affected, and the joints,

they will certainly be cured." This recipe was tried with amazing success in the case of a young girl whose condition was truly deplorable; for she vomited feathers, bundles of straw, and a row of pins stuck in blue paper, as fresh and new as any in the pedlars stall, pieces of glass windows, and nails of a cart wheel; as may be seen in the "Wonderful and True Relation of the bewitching a young girl in Ireland, 1669. by Daniel Higgs.

The hearer by this time no doubt has asked wither does all this tend—our answer is, to this conclusion. We feel with you that we have already exceeded the limits of one lecture—but find one apology therefor, and is this not enough? We have been treating upon a subject that ere to-morrow's sun, may, with you, involve the question of life or death! For hecatombs of human beings are now being sacrificed to some of these Molochs! Our aim will have been attained, if you shall have perceived from what has been adduced: That the Old or Eclectic school has ever been open to, readily received, and adopted the principles of philosophy, and of the sciences as they have advanced in every age, and rejected their errors in like ratio. That all ages preceding have had their crudities and wondrous medical cures and the 18th and 19th centuries are not wanting in theirs. That testimony *ab extra*, that is from without the medical profession, and that too volunteered by the most gifted in their time, of the efficacy of panaceas, was as plentiful as now; that is most likely to be of worth which emanates from individuals who cultivate one department of learning and in giving testimony confine themselves there; that kings, princes, bishops, priests, judges and the *vox Dei* of a populace may utter a true voice in many matters, yet without knowledge of collateral sciences are illy qualified to recommend, much less to judge of new views in medicine, or weigh the old, be they superficial or profound. That in short a King James, Berkley, Bacon, Wesley or Milton, or among moderns Bulwer, Martineau or Bryant, and those seated in high places may be good rulers, theologians, philosophers, novelists or poets, yet poor physicians, mechanicians, navigators, or land surveyors. The world is too wide, mechanism too complicated, medicines too numerous in kind, and the laws which govern their action too dependent on time, and occasion and circumstance, for any, even the many-sided, and most gifted, and most studious to hope to compass them all.

All of the articles of medicine, and most of the doctrines of the schools of which we have spoken have had their centuries of proof of their value. Many of them are now discarded as ridiculous, though few indeed were there of them which were permitted to die without benefit of clergy!

Homæopathy, Hydropathy, Mesmerism in medicine, (we say nothing of the psychological phenomena,) cry loudly for their adoption, and their admirers rest their *faith* in their *experience*. But such experience without collateral information to combine and contrast, often *has* and *may* lead to results like the following, copied from Burton, as illustrative as well as characteristic.

"Last of all it is required that the patient be not too bold to practice upon himself, or try if he read a receipt in a book. (Newspapers were not in his time.) That which is well for one man may not be for another. An ass and a mule went laden over a brook, the one with wool the other with salt; the mule's pack was wet by chance, and the salt melted, his burden the lighter, and he thereby much eased; he told the ass, who, thinking to be as well benefitted, wet his pack in the next water, but it was much heavier, and what become of him my story saith not; look about and he may yet be found, *perhaps!*"—p. 305.

Thus are we to distrust the power or competency of observers, who boast even of experience when setters forth of strange doctrines, which war with all philosophy and science, which are parts component of the science of medicine. In the words of the celebrated Mr. Locke, from his Essay on the Human Understanding, we add:—"Those who have not thoroughly examined to the bottom all their own tenets, must confess they are unfit to prescribe to others: and are unreasonable in imposing that as truth on other men's belief which they themselves have not searched into, nor weighed the arguments of probability on which they should receive or reject it."

The field of science is one of battle no less than one of progress. Errors are to be warred against; and though the veterans in medicine are not often knighted for their courage, yet there are not wanting Wellingtons and Napoleons, in their ranks, though unknown to fame. Those who have faced and stayed the march of small-pox, plague, cholera, and ship-fever, are its true heroes, battling manfully, and the past year's experience tells of their fall, unappreciated, scarcely known a few leagues from that field of chosen labor,

"Where the equal thought he bore of life or death,
Made him faint on neither side."

"And where he hath used no ambition to commend his deeds,
The *deeds* themselves, though mute, spoke loud the deed."

"The wages of every noble work do lie in heaven, or nowhere," says Carlisle, and thither have they been borne to their reward.

To those medical students from the University who have given an hearing, we have but to remind them, in conclusion, of that law in optics, whose sight through a pin-hole, presents objects greatly magnified, by reason of a few rays of light and a narrowed vision—here he may find the new visionists. That other law of optics, of known worth to the astronomer, presents to you—he sees farthest and calls out of the vast expanse the most stars, who, having a single eye fixed upon an object as a pole-star, causes the other to scan the firmament obliquely to the compassing of the heavens. The Eclectic thus in the pursuit of knowledge, with an eye fixed upon the keen piercing demands of suffering humanity—there should find his pole-star, while he looks out with the other into the chaos of the past, and resolves the nebulae of opinion of the present, which tend to distract and darken the understanding of the superficial. To the light of inspiration he lays no claim—blind chance has added but little—but to the light of reason he must ever look; and not with both eyes open or shut, be wiled away into fens or morasses by the *igniis fatui* of ephemeral lights which surround him.

Yet when you shall go out into the practice of medicine, be it in city or country, you may from the countenance given to quacks, run the hazard depicted by the poet. Suffice it to say, judging from the past, some there be who will not escape:—

“ You cannot be too cautious, nice or dainty
In your society here, especially
When you come raw from the University—
Before the world has hardened you a little;
For as a buttered loaf is a scholar's *breakfast* there,
So a poach'd scholar is a cheater's *dinner* here:
I ha' known seven of them *supp'd* at one meal.”

NOTE.—For facts and phraseology, not however without referring to original sources, when treating of sympathetic powder, weapon ointment, metallic tractors, tar-water, and Homœopathy, the writer is often indebted to the author of two published lectures—Dr. Holmes of Boston, entitled “Homœopathy and its kindred delusions,” a small volume of interest to the curious in such subjects.

The reader will please notice the following among other ERRATA:—Page 4, for *cerrostrati*, *irothermal*, *isochemical*, read *cirro strati*, *isothermal*, *isochimemal*; page 5 line 30, *ridicule*, for ridiculous: page 6, line 3, *physical*, for physic: p. 11, line 25, *pages* for papers,—line 27, *large*, for red-hot: [no such exaggeration is needed!] p. 14, *Buffon is*, 210, for 18, 210: p. 17, line 9, *Tajura*, Egypt, for Tassura.

ART. II.—*Report of Cases in Dr. Hamilton's Surgical Dispensary, in the Medical Department of the University of Buffalo.*

The case of Hare-lip, (case 7) reported in the May number of the last volume of this Journal, has had a singular termination. Dr. H. supposed that the parents understood that they were to return with the child and have the lip dressed in a day or two; but they did not so understand it, and for several weeks, notwithstanding the most diligent enquiry, nothing could be heard of them; and the conclusion was that the child had died from the operation. It is now however ascertained that the little patient is alive and well, and that the lip is handsomely united. Yet the dressings were never touched or removed and the stitches were allowed to fall out spontaneously.

Necrosis of Inferior Maxilla.—James McKay aged 4 years. Had Rubeola eleven months since, about three months after which a pain commenced in the lower jaw, or in a tooth, followed by a swelling.

The jaw is now considerably distorted, and the teeth upon that side are loosening. Patient is in pretty good health, and has very little pain.

The parents were advised not to allow any interference in the process of nature to exfoliate the dead bone at present. If the general health should suffer, or the exfoliation proceed too slowly, both medical and surgical interference would be proper. The class were cautioned especially against the *nimia diligentia*, of officious surgery in similar cases. It is seldom that here anything more is necessary, than to wait patiently the course of nature. It is well enough to inject a weak solution of castile soap and water, merely to keep the sore cleanly, but stimulating and irritating injections are positively injurious.

May 15th, *Encysted Tumor.*—Man aged 70 years. Sixty years ago this tumor was first seen on his left temple. It has grown gradually to about three inches in length, and one and a half in breadth. It was at first elastic and has never been painful. Within a few weeks it has become much softer, and probably will open. Of course even a simple tumor of such long existence, and showing a change of character at this age, is not without danger. But he is advised to let it open, and perhaps it will discharge and disappear, if it does not, it will then be the proper time to interfere. It has illustrated one thing, namely: how little disposed such tumors are to disappear spontaneously, and it may hereafter illustrate another, namely: that they may at last become malignant.

The same patient has a chronic inflammation of the capsule of the knee joint of five years standing. The limb is improved by moderate use. This is not unusual.

Double Inguinal Hernia.—Lad seven years old; never has been able to keep the hernia up. Dr. H. applied Chase's truss, which after several weeks trial has succeeded perfectly.

Deafness, &c.—Negro aged about 20. This, if stated correctly by the negro, is a singular case. He appears very intelligent and honest.

Five years ago he lost his left eye from inflammation following an arrow wound, and as the inflammation in the eye subsided, his hearing became defective; and finally when the inflammation was fully gone, he was completely deaf. The inflammation in his eye, however, returned, and with it, to a considerable extent, his hearing. These alternations have taken place several times, and the two circumstances always bear the same relation to each other. In some of these attacks of deafness, he has had much pain in the ear and discharge of matter, he had also severe pain in his head. For the last year he has been perfectly deaf without any intervals of partial relief.

It is diagnosed as a destruction of the labyrinth by inflammation and suppuration, and is consequently irremediable.

Chronic Synovitis.—A man from Oswego Co. aged about 30, sprained his knee two years since. It immediately became much swollen and it has remained lame and more or less swollen ever since. He has derived temporary benefit from iodine applied externally, and also from a succession of blisters applied by Dr. Hard of Oswego. He has tried perfect quiet for ten days, but at the end of this time the limb was more tender than at first.

Dr. H. after alluding to the diagnostic marks in this case, and advising a continuance of the iodine externally, with the addition of the cold dash and moderate use of the limb, remarked upon the frequency with which he had noticed that moderate use of the limb had restored the joint to health. It is a somewhat popular professional error to keep such limbs a long time perfectly still. This is certainly proper when recently injured, or acutely inflamed; and inasmuch as frequently the swelling and tenderness continue scarcely abated while the inflammation has lost entirely its active character, it is certainly not singular that the change should not be always noticed and the treatment accordingly varied. There are two or three points however, which may serve as our guides. If several weeks or months have elapsed since the receipt of the injury; if the swelling is rather œdematous than otherwise, or extends below considerably beyond the

diseased part, if the tenderness is also spreading over the whole limb, and is superficial, if the patient is of lax habit, or if he assures you that it feels better when in moderate use; if several or all of these conditions exist you may feel certain that it requires the tonic of action, and the longer it is kept still the worse will matters become. (The patient has been heard from several weeks since the above was written, and he is rapidly improving.)

Partial Luxation of Acromial end of Clavicle Upward.—This is an old lady who fell on the shoulder last christmas, and produced a semi-luxation of the outer end of the clavicle. She has also suffered considerably ever since from lameness in the deltoid, soreness in the joint and pain and numbness in the hand and arm. It is for these latter difficulties, which threaten to render her arm useless, that she applies for relief. The luxation has nothing to do with these circumstances, and is only of interest as being of rare occurrence. The luxation is in that direction in which it almost always occurs, viz, upwards. It is too late now to think of reduction. The means of reduction and retention are precisely those which would be proper in a fractured clavicle. But it is not probable that if the proper apparatus had been applied from the first it could have been made to stay in place. Nothing has yet been said in the books of the difficulty of retaining the small articular surfaces of long bones in their places, yet it is very important for you to know that it is nearly impossible. This remark applies to dislocations of the clavicle at either end, to dislocation of the lower end of the ulna, of the upper and lower end of the fibula, and to some extent to dislocations of the upper end of the radius; it also applies in some degree to phalangeal and metacarpo-phalangeal dislocations. Of all these the clavicle and lower end of the ulna are the most troublesome. If you will measure the breadth and circumference of this latter after a heavy fall on the palm of the hand, producing what is called a sprain of the wrist, you will often find that the ulna is separated from the radius and generally carried a little forward, and so it will always remain.

Sub-luxation of last Articulation of Thumb.—This is another illustration of what has just been remarked. The young man fell four weeks since upon the distal end of his thumb. It was followed by some inflammation and now a slight deformity, evidently produced by a partial displacement of the articular surface, is apparent. There also remains slight ankylosis.

Compound Comminuted Fracture of Humerus.—This gentleman is a private patient of Drs. Sprague and Hamilton, but he has consented to give the class the benefit of his misfortune. Fourteen weeks since his arm was broken near the condyles by a severe blow from some part of the waggon

with which a couple of horses were running. It was dressed by Drs. Hamilton & Sprague, by removing the loose fragments—applying moderately, as a support, an angular splint with moveable joint, and then laying it on pillows. The inflammation has gradually subsided, but the wound still continues to discharge, and there is now very little motion in the joint. This however is perceptibly increasing, and Dr. H. hopes he yet may recover the use of his limb entirely. This however he has never been encouraged to expect.

Congenital Encysted Tumor.—This child, aged fourteen months, has a large translucent tumor on right side of neck—the size of my fist, which tumor commenced prior to birth. As its appearance was extraordinary, Dr. H. opened it carefully with an iris knife and expressed the contents, which were a pale serum, resembling the fluid of a hydrocele. Dr. H. directed that this operation should be repeated as often as it filled, and he predicted that after a time it would imperfectly suppurate, and disappear.

Strabismus.—Miss —, aged 18, of Buffalo. The right eye is turned in very much. Produced by small pox, when she was two years old. Five years since she was operated upon by an itinerant at Milwaukee Wis., but the operation left the eye just as it was before.

Dr. H. operated before the class upon the same eye, and found the tendon inserted about two lines farther back than usual; this accounts for the operator not reaching the tendon before. The eye immediately became straight after the tendon was divided, and still remains so.

WM. WHITE.

ART. III.—*Cases at the Medical Dispensary, Medical Department of the University of Buffalo—Session 1848. By the Editor.*

During the lecture session, at the Medical College of Buffalo, a dispensary for medical cases is open for indigent patients who may choose to avail themselves of it upon the condition of appearing before the class. Patients presenting themselves at this dispensary are examined and prescribed for by the Prof. of the Principles and Practice of Medicine; and on stated days, when they appear before the class, the cases are made subjects for practical instruction in diagnosis, pathology, and therapeutics. A considerable proportion of the cases, as would be expected, are sufficiently common, and, although not less instructive to the class on that account, would possess no novelty for the medical reader. Some of the cases, however, as would also be expected, were not without features suggesting practical

considerations of interest to the practitioner, as well as the novitate. We purpose to select a few of the latter for brief notice and comment in the present article. Notes of all the cases presenting at the dispensary are preserved in a register devoted to that object, together with memoranda of the points to which the attention of the class was particularly directed. We select the cases from the collection as thus preserved, offering such remarks as suggest themselves in making this report. The cases are selected in order, as contained in the register, without following any arrangement.

Case 1. Chronic Eczema.—S. H. aged 14: Has suffered from cutaneous eruption for thirteen years. At first it appeared on the face and scalp; afterward on the upper and lower extremities simultaneously. For the three past years it has been confined to the lower extremities, mostly between the ankle and knee. States that his mother has always been subject to a similar affection, but less in degree. The eruption is manifestly Eczema. The affected parts are red, hot, and covered, in discrete patches, with thin incrustations. No elementary vesicles are discoverable.

He has had a great variety of treatment, but cannot specify what it has been. Has taken, among other things, thirteen bottles of sarsaparilla.

Directed (after remarks on the case) as follows: rigid cleanliness by daily ablutions of the affected parts; Fowler's solution grt. v. three times daily; reduced citrine ointment.

This case, with the above history, presented itself at the session preceding the last, May, 1847. Under the foregoing treatment the patient rapidly improved, and reported well, June 24, 1847, for the first time for thirteen years.

In February, 1848, he again presented himself at the Dispensary. He had continued free from the disease up to the middle of January, when it again made its appearance in the same locality. Since then it has rapidly increased, and is nearly, if not quite as bad as when he first came under notice, in May 1847. He has also suffered, and still suffers from sub-acute laryngitis, being unable to speak above a whisper. He has no cough, no expectoration, no uneasiness in the larynx, nor embarrassment of respiration—nothing but the aphonia.

After some remarks on cutaneous diseases generally, and the diagnostic features of Eczema, it was concluded to prescribe the Liquor Potassæ Arsenitis, and to make no medicinal applications to the affected parts, but to enjoin rigid ablutions; the object being to test the therapeutic efficacy of the internal remedy in this case, conjoined simply with cleanliness.

March 4.—Limbs somewhat improved. A few days previous to this date, oedema of face occurring, the dose of Fowler's solution was diminished to three drops, three times daily. It was now decided to discontinue the internal remedy, and in order to see what effect will follow a local application exclusively pursued, the same remedy which was employed the previous spring was prescribed, as follows:—Ung. nit. Hydrarg, 3 ij. ung. aquæ rosæ 3 iss. M. Affected parts to be covered with oiled silk. Milk and farinaceous diet.

March 13.—Much improved. The local application has evidently been useful. Prescribed on this date, with reference to the Laryngitis, as well as the Eczema, the following:—Iodid. Potassii 3 ss. Aquæ 3 iv. Teaspoonful three times daily.

March 18.—Limbs nearly well. The cutaneous affection and the Laryngitis were both cured under the above treatment.

REMARKS.—*A sine qua non* in the treatment of chronic Eczema, (and the same remark applies to Impetigo,) consists in the daily removal of the morbid exudations, by means of ablutions with simple water, or water rendered alkaline by potash or soda. The exudations should be dissolved and washed away, not removed by force, and care not to irritate by friction in the process is important. When the incrustations are thick and adherent, a poultice applied for several hours, or the warm water dressing, should precede the ablutions. Simple cleanliness, perseveringly continued, conjoined with regulated diet and regimen, will often suffice to effect a cure; without attention to these points, remedies, in a large proportion of cases, will be useless. One of the greatest obstacles in the treatment of obstinate cases of these affections, is the difficulty of securing cleanliness. Patients or friends will not take the necessary pains, and will insist that the cure shall be accomplished solely by medicinal appliances.

The local application which we have found oftenest useful in the two affections named, is the citrine ointment. It should be largely reduced. Simple cerate may be employed to dilute it; but this preparation, as kept by apothecaries, frequently becomes rancid, or is made with rancid oil, and proves irritating to an excoriated surface. Hence, we are in the habit of prescribing the Ung. Aquæ Rosæ as the vehicle for the mercurial.

A nutritious, non-stimulating diet, is important, and living in the open air is generally an useful regimenal point.

Internal remedies may not be called for. The Liquor Potassæ Arsenitis frequently exerts in these, as in other chronic cutaneous affections, a surprising efficacy. The above case is interesting chiefly from its long duration,

having existed almost from birth, and the promptness with which it yielded to the therapeutical course pursued. The patient presented no evidence of scrofulosis beyond the eruption, and his general aspect was not unhealthy.

Case 2. Suspected Tuberculosis of Lungs in stage of incipency.—M. S., aged 18: Mother living and in good health. A brother died with consumption. Father died with the same disease at the age of 44.

Patient was never ill with any notable ailment, until present affection. Began to cough in June 1847. Cough has continued up to the present time, February 1847. The cough was for a long time dry; has expectorated for the last three weeks, most freely in the morning; character of expectoration not recorded. Has been more ill for the last three weeks than previously, in several particulars. Has felt debilitated, and general malaise. Chills have occurred on going to bed, followed by febrile movement, and sweating. These have occurred about every alternate night. Had Int. fever about four years ago, which continued three weeks. Has had no pleuritic stitches. Has lost flesh, but is not emaciated. Still continues at work. Appetite good. Bowels regular. Physical signs, at a single examination, negative.

The patient was a poor boy, and has been, heretofore, accustomed to peddle nuts, etc. for a livelihood. Of late he had been employed in a beer and cider establishment, the proprietor of which was willing to provide what might be necessary for the restoration of his health.

REMARKS.—The question of prime interest and importance in this case, related to the diagnosis. Was the disease Chronic Bronchitis, or incipient Tuberculosis? The long continued dry cough, not succeeding an attack of acute bronchitis; the presumed hereditary predisposition; and the paroxysms resembling hectic, were circumstances exciting strong suspicion of the latter. The account is deficient as respects the state of the pulse, skin, &c. They probably presented no morbid symptoms, appreciable at the examination. Physical exploration, at a single examination, revealed nothing positive. The tuberculous deposit could not, therefore, have been extensive; but it is well known that small tubercles may exist in large numbers, before coalescence, separated from each other by healthy lung, without being readily detected by physical signs. Repeated examinations, under such circumstances, frequently enable us to discover some deviation from the normal signs, which if constant, and fixed at a particular location, especially near the summit of the chest, although trifling in amount, authorize, when taken in connection with the symptoms, a positive diagnosis. A deduction of this sort, however, cannot be made from a single exploration.

toration. When he does not expectorate, suffers much more from dyspnoea. Has always kept at work. Has been treated formerly by Thomsonian practitioners. Never has consulted a regular physician until now, but, since losing confidence in Thomsonism, has resorted to a variety of patented nostrums. Is not much emaciated. Muscular strength pretty good. Always suffers most at night from dyspnoea. Is obliged to lie with his head elevated, and sometimes to sit up all night. Chest presents good resonance, marked general amplitude, with the sibilant and sonorous rales. Sounds of heart normal. This was the record March 22. The diagnosis was Emphysema. After remarks on the various morbid conditions with which Astmatic affections are connected, the patient was advised to try the inhalation of Chloroform moderately, to relieve the dyspnoea.

On the 23d. he reported that he found considerable relief from the chloroform. The copaiva mixture was then prescribed; the inhalation of chloroform to be continued.

March 25, Reported much improved. Is able to sleep comfortably at night, and thinks he is able to go to work. Has used the chloroform frequently since last report.

REMARKS.—This patient did not again present himself. The case offers nothing peculiar, nor interesting, except the use of the chloroform as a palliative. In so far as this single instance affords any grounds for a deduction, it would seem that this agent is well adapted to that object. The philosophy of its applicability would seem to involve spasm, as an element of astmatic dyspnoea, dependent upon muscularity of the smaller bronchi. The latter, although still mooted, we suppose has been abundantly demonstrated.

Case 5, Azoturia.—The subject of the following case did not present himself at the Dispensary. He was a patient of Dr. Sprague, of this city, to whom we were indebted for specimens of urine, which were exhibited to the class, illustrating a rare and interesting variety of urinary disorder. The first specimen was received on the 25th February. Its sp. gr., as determined by the urinometer, was, 1,030. It deposited no sediment, resembled porter in color, and emitted a strong urinous odor. On placing a portion in a watch glass, and adding an equal quantity of nitric acid, two thirds of the mass became solidified in about half an hour. The solid deposit presented an appearance of minute crystals, (nitrate of urea). The test was repeated several times with the same result.

March 1st. Another specimen was obtained, which contained a mucus deposit, at first white, but which afterward became red. On shaking the

vial the sediment disappeared, and the urine became somewhat turbid. Sp. gr. 1,030. On testing as before, the same results were obtained.

Dr. S. furnished verbally the following account of the patient:—He is a German laborer, and had suffered for some time from indefinite ailments, such as indigestion, palpitations, neuralgic pains in chest, etc. He has constantly wasted in flesh. He had been a patient of a Dutch uriscopic empiric, who had examined the urine only as regards its sensible appearances. Dr. S. was treating him with tonics and anodynes, under which treatment his health was manifestly improving.

REMARKS.—This is a very rare form of disease. Dr. Prout, in his immense experience with urinary affections, met with it in but a few instances. He states that he has met with Diabetes Mellitus twenty times to this disease once, and Diabetes is a very rare disease. Dr. Prout thinks it precedes Diabetes in some cases.

The affection involves mal-assimilation, or disorder of the molecular changes incident to nutrition. Adopting Dr. Prout's nomenclature, it denotes defect in either the "primary" or "secondary assimilatory processes," of which the increased quantity of urea in the urine is only a consequence. Emaciation must necessarily ensue as a result of its continuance.

It may be supposed that the neuralgic pains, the palpitations, etc., are due to the urea, circulating with the blood, acting on the nervous system. We regret that we are unable to give a history of the case with more detail. The treatment recommended by Dr. Prout is (first) to avoid rough treatment: (second) tonics and anodynes. The latter had been employed in this case with good effect.

The case exemplifies the importance of examining the urine in cases of indefinite disease accompanied with wasting, with a view to this disorder.

Case 6, Tuberculosis of Lungs.—We select the following from the cases of tuberculous disease of lungs, as furnishing some points of interest.

G. W. C. aged 25. The general history was as follows;—When seventeen years of age he began to experience pain in the right side of chest. Before this, his health, from childhood, had been perfectly good. The pain was sharp, nearly constant, but not so severe as to lead him to apply for medical aid for eighteen months. He then placed himself under the care of a physician, who vesicated the chest, and afterward prescribed strengthening plasters. He took no internal remedies. The pain was relieved by these measures, and for some years afterward he felt no pain, but was conscious of a weakness in the part.

In 1844-5, had recurrence of the pain during the winter, affecting both sides of the chest, which continued four or five months, and passed away in warm weather. Took only tar water, and a patented preparation of tar and liverwort.

Went to Mexico, with the army, in the autumn of 1845, as clerk in quartermaster's department. He was subject to great exposure in Mexico. His habits of life there, and previously, were very irregular. During the winter of 1845, had recurrence of pain in the chest, with cough, and expectoration of matter streaked with blood. Had had some cough and expectoration from the commencement of the disease, varying much in amount at different times. In the spring of 1846, he had, what was called rheumatism of hip and knee joints, affecting these joints only. During summer of 1846, he was free from pain in chest, but was lame all summer from affection of hip and knee joints.

In the winter of 1846-7, he lived at Cincinnati. Suffered from pain in chest, at times, but not severely.

In the summer of 1847, felt nothing of the pain in chest; but on coming to this city, in the autumn of the same year, he began almost immediately to experience pain in chest, which was quite severe. He had, at the same time, more cough and expectoration than usual. More or less cough had existed all along; more at some times than at others, and at times nearly, if not quite absent. Pain has frequently shifted its location, and has always been sharp in character, whether severe or not.

In January, 1848, he was seized suddenly in the street with hæmoptysis. Expectored blood copiously. Slight attacks of hæmorrhage occurred for three or four days subsequent to the first attack. At this period, he consulted Dr. Lockwood, of this city, by whom he was advised to apply at the dispensary for examination, in April, 1848. In the meantime, since January, he had had two attacks of hæmoptysis, one about two weeks after the first attack, the other about two weeks since. The expectoration for the past month has been more copious than before. Its characters are not recorded. Has pain in chest still at times. It occurs, whenever he makes muscular exertions. Appetite is tolerable. No evidences of indigestion. Bowels regular. Tongue furred.

Pulse 100, small and feeble. Had not observed any febrile movement at night. Has perspired for three or four nights past—not before.

His respiration is hurried on exertion. Is easily put out of breath.

Stated that he had lost a good deal of flesh—he estimated 30 pounds—

chiefly the last winter. Does not present the appearance of marked emaciation.

Has never had chills. His father not living—died from an accident. Mother still living, and in good health. Family not prone to pulmonary complaints. A brother expectorated blood many years ago, but recovered, and is still in good health.

On physical examination the resonance seemed duller than would be expected, in health, on both sides anteriorly, but slightly duller on the right, than on the left side. Sounds of the heart very audible on the right side. Respiration on the right side extremely feeble, and, for the most part, inappreciable. Vocal fremitus particularly perceptible through the stethoscope, on the right side. On the left side respiration feeble. Expiratory murmur not perceptible. Posteriorly slight sub-crepitant rale on the left side. Respiratory murmur feeble on both sides, and expiratory murmur not perceptible.

REMARKS.—The diagnosis in this case was tuberculosis, not associated with a strong tuberculous diathesis. The history does not exhibit the usual course of progressive phthisis. The disease has been induced, in a great measure, probably, by exposure, and irregular habits of life. It is a case in which the physical signs, although not of a striking character, are yet quite decisive; and it is by means of these signs, chiefly, that the diagnosis is rendered positive. The tuberculous deposit, although existing in both sides, is larger in the right side.

The case illustrates the determinate value which attaches to certain physical signs, small in amount, when grouped together, and connected with rational symptoms. The slightly relative dullness on the right side, the feeble respiration, vocal fremitus, propagated sounds of heart, suffice to render the diagnosis positive, even upon a single examination, especially when taken in connection with the history.

The pains in the chest, which appear to have preceded, and which accompanied the tuberculous disease, is a singular feature of the case. It would hardly seem that they could be wholly due to pleuritis supervening upon the tuberculous deposit, but were probably of a neuralgic character.

As the history of the case does not disclose a strong constitutional tendency to phthisis, it is possible that the progress of the disease may be retarded so that life may be prolonged for an indefinite period. The non-use of medicinal agents except those of a tonic nature, regulated habits of life, nutritious diet, and living in the open air, with the observance of hygienic measures of every description, in our experience, furnish the

most reliable means for effecting this result, which, although by no means frequent, still occurs sufficiently often to warrant, in many cases, sanguine hopes of its attainment.

The patient did not present himself except on the occasion when the foregoing examination was made, April, 1848.*

Case 7. Prurigo Formicans et Senilis.—The following case is only interesting as respects its history and diagnosis. The remedies which had been employed previously to the application of the patient at the dispensary, were not known, nor has the result of those suggested at that time been communicated to us. We select the case on account of its presenting a rare form of cutaneous disease—rare, at all events, in our experience.

A. W. H. Farmer, aged 54. Enjoyed pretty good health until five years ago, when he began to suffer from his present disease. Thinks his constitution has been somewhat injured by hard labor.

The eruption first appeared on the face, and more particularly about the eyebrows. For sometime before the first appearance of the eruption, and afterward, he suffered from depression of spirits, dullness of mind, disposition to sleep, etc.

He has suffered from the disease, for five years, during the whole of the winter season, and more or less through the summer. The periods of intermission in the summer season, have been annually less and less. Until the last winter, the eruption had been limited to the face. For the last winter it has affected the arms, especially the forearms, and also the inner side of the thigh. Appetite and digestion all the time good, and bowels regular. Appearance of the urine natural.

The pruritus is intense, especially at night; so much so that sleep has been almost impossible for weeks in succession. He cannot sleep in a room heated by a close stove, nor can he sit in one during the day without intense suffering from pruritus. The pruritus is accompanied by a sensation as if small insects were creeping under the skin: this is especially the case on the face. Skin becomes at times thickened and chapped.

The characters of the eruption are as follows:—Small, hard, round papules, of the color of the skin. No papules at the examination were perceptible by the eye, but the skin feels roughened on passing the hand over it. Small dark scabs are thickly scattered over the face, and forearms, presenting an appearance highly characteristic.

The patient has abstained from animal food for the last three years. He has found by experience that he was worse when he ate meat. He has

*We have lately been informed by Dr. Lockwood that this patient is declining, being now unable to leave his bed.

taken a great variety of medicines, and employed all sorts of practitioners. Has applied an infinite number of washes. Does not know the nature of the remedies he has taken, nor the composition of the washes. He has received little or no benefit from anything he had done.

The patient resided in an adjoining county, and the case was not afterward heard from. The treatment recommended, was a faithful trial of the *Liquor Potassæ arsenitis*. If this fail, the carburett of Potash, Iodide of Potassium, and the mineral acids were suggested. The warm bath perseveringly employed, was also advised, and acetic acid diluted, as a wash to relieve the pruritus.

Among the different species of the genus prurigo are two, called *P. sessilis* and *P. formicans*. The former term is applied to the disease as it presents itself in the aged. This species is peculiarly obstinate, and often incurable. The latter term denotes a peculiar pruritus which is compared to the crawling of insects under the skin. The patient in the foregoing case described such a sensation, and as he was somewhat advanced in years, the disease may be said to be of both species.

Case 8. Diabetes Mellitus.—B——, a German, aged about 30, a joiner, unmarried, presented himself, April 6th, with the above disease. The urine was tested by yeast, and exhibited evidence of the presence of sugar in abundance. The quantity of urine was greatly increased, but the precise quantity expelled in a given period, was not ascertained. Patient stated that he thought he passed about four quarts during the night. The urine was frothy on agitation, and exhaled the characteristic fragrant odor, something like newly mown hay. The patient's breath had the same odor. Sp. gr. was obtained, but not recorded.

The disease had been known to have existed for seven months. It was preceded, as he stated, by an attack of pain in the chest and fever—inflammation of the lungs, as he was told by his physician. Six weeks after this attack, he first noticed that he voided a larger quantity of urine than usual. Had never observed any sediment. His health had been good up to the febrile attack just mentioned. Had lost some flesh, not much; precise quantity lost not known. His present symptoms, were as follows:—Appetite pretty good: Suffers from indigestion and regurgitation of food: Complained of a bad taste in mouth, which he could not describe, said it resembled, somewhat, that of a rotten egg: Burning pain at epigastrium: Gums swelled, red and spongy: Suffered from constant thirst: Bowels very costive: Fæcal matter dry and hard. Restless and irritable: spirits depressed: sleeps sometimes well, and sometimes badly: slight cough,

which is dry: catarrhal discharge from nostrils: skin extremely dry and rough: pulse accelerated, and somewhat vibratory.

He had not, as yet, abstained from diet containing saccharine principles. The treatment recommended was as follows:—Animal food, eggs, rice and hard biscuit, for diet; the warm bath daily, and the citrate of iron in combination with sulph. quinine.

One month afterward, the patient again presented himself, stating that he had faithfully followed the above course of treatment; that he had gained in strength, but not in weight; the quantity of urine had diminished about one half. It was not tested at that time, but its appearance, and peculiar fragrant odour, demonstrated the presence of sugar. The odour of his breath was still noticeable, and was so obvious, that he was recognized by this circumstance, before we could call to mind the case from recollection of his countenance. His teeth had that whiteness which belongs to this disease. He applied at this time to know if a sea voyage would be likely to be serviceable, and, if so, he purposed returning to Germany. He was encouraged in this idea, and left for the seaboard.

REMARKS.—The presence of sugar in other secretions than the urinary secretion, and in the blood, which late researches have abundantly demonstrated, render it inappropriate longer to rank Diabetes among Renal diseases. It is a disease affecting the assimilatory processes, in consequence of which sugar ingested passes unchanged into the bloodvessels, and alimentary principles capable of being converted into sugar undergo that chemical change. The kidneys are involved only as one of the excretory outlets by which this useless saccharine material is eliminated from the system. The hyper-secretory action of the kidneys, (which is probably due to the presence of the sugar acting as an excitant,) constitutes an important element of the disease. This will serve to explain, in part, the dryness of the surface, the costiveness, the thirst, etc. The loss of those alimentary principles which contain sugar, or are capable of conversion into sugar, for all purposes of healthy assimilation, will explain the debility, the wasting, and the great gravity of the disease. We have thus advanced a considerable way in our knowledge of this disease; but we are still at a distance from knowledge of the nature of the perversion which the processes of assimilation undergo, and of the ulterior morbid condition upon which this perversion depends. In other words, its true pathology, and, as a matter of course, its ætiology are still unknown. The knowledge, however, which has been acquired is not without practical value. It prevents, in the first place, treatment based upon the idea of its being essentially an uri-

nary disorder, and other false pathological views, and in this way saves the patient from measures which might prove not only useless, but injurious. This, although negative, is, nevertheless, not the least important of the advantages which attend improved knowledge of diseases generally. But it leads to a positive advantage in teaching the propriety of withholding, in as far as practicable, aliment of a saccharine nature, and aliment capable of being readily converted into sugar. In this way the quantity of sugar in the urine is almost sure to be considerably diminished, and, as a consequence, the amount of urine is lessened. Although the measure is but palliative, it is vastly important, inasmuch as, in itself, it serves to prolong the life of the patient, and gives time for the employment of means by which, it may be hoped, a cure will be effected. With reference to the latter, science gives but little precise information, and experience not much encouragement. Our rational course, in the present state of knowledge, is to endeavor to restore the proper action of all the functions, and, especially, to modify and improve the processes of assimilation. For this end, tonic remedies, nutritious diet, and hygienic regulations of every description, are essential.

Case 9. Spinal Affection.—The following case is given as illustrative of a class of cases, sufficiently numerous to be frequently met with by every practitioner, for which it is difficult to find, nosologically speaking, a local habitation and a name. They have been called at different times by different appellatives, and are distinguished among different practitioners by different titles. Formerly, it was fashionable to include them under the term, dyspepsia. Of late, they have been oftener classed under the head of spinal irritation. We have adopted of late years, the latter plan, using the expression *spinal affection*, as less involving hypothesis concerning the pathology. The pathological relations of the spinal cord are involved; but we are not prepared to say that the affection is primitively located in the spine. The cases referred to are distinguished, at first view, rather by the great diversity of symptoms which are presented, than by the close analogy which they have with each other. The phenomena are infinitely varied. They are united, however, by some points which are common to all. Some of the most important of these are as follows:—The phenomena involve, par excellence, the nervous system, and are constantly varying in the same case, being widely different at different times. They are attended with a peculiar sense of debility, consisting of a want of the consciousness of ability to exert muscular power, rather, than an actual disunion of that power; and this sense of weakness comes and goes,

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being present on some days, and not on others, and at some portions of the same day, and not at other portions. The symptom alluded to, is, perhaps, located in the mind, rather than in the muscular system, and an inability to exert the mental powers is equally characteristic. Depression of spirits is almost invariably present. There is almost uniformly tenderness on pressure over some portion of the spine, which, however, in its degree, bears no constancy of relation to the other symptoms. These are some of the positive symptoms which are common to all cases. But the cases are associated together, negatively, by the absence of evidence of inflammation, or lesions of the organs whose functions are disturbed, and by the fact that the function of nutrition is seldom impaired by the affection, even when protracted. British writers describe the malady under the title of Hysteria, or the Protean disease. In some of its forms it may be embraced under the head of Hypochondriasis. By means of the physiological and pathological relations of the spinal cord, we can explain many of its phenomena; but we suppose the cord to be generally affected secondarily, and the most frequent general condition which obtains is anæmia. But we cannot undertake to write a dissertation on the affection in this connection, and will now proceed to the case, to which we will append a remark or two, if space permits.

S. aged 40, shoemaker. "Never knew a day's illness up to six years ago last April." He was seized suddenly with chills, and pains in epigastrium and left side. The chills continued only a short time, but the pains continued through the night, recurring in paroxysms with a few moments intermission. He was attended at that time by Dr. A. He was confined to his house a month by weakness, and then came out to his shop, but felt too weak to walk home, and was carried back. After that he was confined to his bed all summer, with, as he says, weakness. Had no pain, and appetite pretty good. In August he first began to walk about the room. Was lifted out of bed, and carried out of doors in a chair frequently during the summer. Dr. L. attended during this summer.

In the winter he was able to walk about town. Dr. W. attended during this winter. The next summer he walked about, except at times when he was unable to do so, as he states, from debility and "pains all over." Had no medical attendance during that summer. This was in 1843. In the winter of 1843-4 he was attended for several months by a "Botanic Practitioner." Took one steam bath, and and various remedies. During the latter of winter and in the spring of 1844, had no medical attendance. Says he was able to get about a part of the time, and a part of the time

he was unable, from debility and universal pains. In the summer of 1844, he improved, but suffered in damp weather invariably. Had no medical attendance.

Went to England in October, 1844. In the winter of 1844-5, was under the care of Dr. Horner, of Hull, for 8 months. Health about the same as during previous winter. Sometimes could walk about pretty well, at other times states that he would be suddenly arrested when walking, and be unable to move for several minutes: seemed to lose voluntary power over the muscles, and the effort to exert it produced pain. Took considerable medicine, but does not know what it was. States that when warm he could use his limbs freely, but when in the cold air, to quote his language, "his joints and cords were fast."

In summer of 1845, went to Lowth, into dispensary under charge of Dr. Banks, and continued under his care six or eight weeks. Dr. B. advised him to go to Woodhall spa, in Lincolnshire. Suffered through the summer much of the time from weakness and pain. Remained at the spa two weeks. Went in the autumn of 1845 to the Horncastle Dispensary, under charge of Dr. Barton. Continued until July, 1846. Could get about but little through the winter, but was better during the summer of 1846. In August returned to this country. In winter of 1846-7, sometimes could get about, and sometimes not, from debility and pains. Dr. A. advised in February, 1847. In summer of 1847 could walk about part of the time, but felt unable to do any labor. No medical attendance.

Winter of 1847-8. Had been under the care of Mr. Weyburn, (who treats rheumatic affections by vapor baths and shampooing) from November 10th up to May 10th, the time of his application at the College Dispensary. Had been during the winter about the same as during previous winters since the time his morbid history commences. His present symptoms, as recorded May 10th, were as follows:—Aspect rather pallid. Thought he weighed about 20 pounds less than when in health, but did not know his exact weight in health. Complexion not unhealthy. Appetite good. Food occasionally causes oppression. Bowels now costive, but can hardly tell what their natural condition would be, as he has been constantly taking cathartic medicine through the winter and spring. Tongue slightly furred.

Suffers occasionally from slight headach. Sleeps generally pretty well, but sometimes troubled with vigilance. Suffers from pains in chest on each side. The surface of the chest is tender on pressure, pains unaffected by respiration. These pains have been pretty constant since December last;

at times they are severe, preventing sleep. Sometimes they extend to epigastrium. Pulse 70, nothing abnormal. Sounds of heart, and impulsion, normal. Cannot learn that he has ever had febrile movement. Has occasionally been troubled with palpitations.

Has no cough. Occasionally, after eating, has experienced some slight embarrassment in breathing. Skin presents nothing unusual. His urine during the winter deposited a sediment. He brought a specimen at the time, and it proved to be the Lithate of Ammonia.

There is considerable tenderness on pressure over the upper portion of the dorsal spine.

The treatment directed, was S. Quinise and Citrate of Iron, and the application, first of Ung. tart. Ant. over the tender portion of the spinal column, and afterward of Croton oil. The Citrate of Iron and Quinia was subsequently displaced for the sulphate of Iron. Under this treatment, he reported amelioration of the pains in the chest. He was able to be about, but made little or no progress in advancing towards a condition to consider himself able to do anything for his own support.

REMARKS.—This case supplies a theme for extended remark; but we have already occupied so many pages with this article, that we must be very brief.

It illustrates a state of mind, which may eventuate in Hypochondriasis, but which, in its lighter shades, is not so well appreciated. A portion of mankind are able to preserve their energy and activity, notwithstanding disease—they struggle with it, they resist it, they fulfil their duties in spite of it, until compelled to yield, as all must do, sooner or later. Another portion of mankind, present quite a contrast to the foregoing. With them, disease, or even disorder is an insurmountable obstacle. They have no energy to struggle manfully against its influences; they seem to cherish rather than oppose it, and give way to a distrust of their ability to accomplish anything by the force of the will. Life, which is at the best, but a leasehold, is held by a large proportion of mankind under a heavy encumbrance; yet, notwithstanding this, some make it a profitable and even agreeable investment, while others are discouraged and paralyzed by the idea that their bodies lie under a mortgage to disease.

That some forms of disorder tend, more than other forms, to produce a state of mind unfavorable to energetic action and happiness, is true, but it is also true that differences in the mind itself, impose differences in the mental, and even physical characters of disease in different individuals.

Not to amplify upon an abstract view of this point, we have, if we do

not err, in the foregoing case, an instance illustrating a want of mental stamina sufficient to triumph over morbid sensations. The patient, for six years, has felt disqualified for any exertion. His complaints are not imaginary, but on surveying the symptomatology of the case, nothing appears which necessarily compromises, to say the least, a limited activity. A person differently constituted would make the most of what physical powers he still possesses; but this patient, physically speaking, must be *aut Caesar aut nullus*—he thinks he can do nothing until he recovers perfect health. He therefore folds his hands, and sits brooding upon his ailments, passively waiting for health. Under such circumstances, health will probably be long in arriving.

Patients of this description usually consult many medical practitioners in succession. Each new adviser commences with hopes of speedy success; and for a time, novelty seems to have a good effect; but after a while, it is very apt to be the case that patient and physician become mutually tired of each other, and a change is agreeable to both parties. With different practitioners, the affection receives different names. With one it is *liver complaint*; with another, *dyspepsia*; with another, *debility*; with another, *hypocondriasis*; etc. Treatment based upon the views which these names express, is often not nugatory, but hurtful. On the other hand, treatment based upon recognition of the mental characters of the affection, and an appreciation of the pathological relations of the spinal cord, will, to say the least, not be likely to expose the patient to injury from medicinal agents.

Patients of this class not unfrequently go the rounds of empiricians, patronizing in succession, the Steam doctor, the Botanic, the Uriscopist, and the Homœopathist; and it is this class which contribute not a small share of the profits of the nostrum maker, and the nostrum vender.

With reference to the proper plan of treatment, we will only say, in brief, that it embraces the observance of Hygienic laws; tonic remedies, and especially chalybeates, (being so often associated with anæmia); counter-irritation over the spine; diversion of mind by occupation; removal of groundless apprehensions; encouragement, and the *development of more mental energy and strength of will*. That portion of the treatment addressed to the *morale*, and especially that which we have Italicised, expresses what is wanting for recovery, rather than what the physician can be expected to impart. If the view of the affection which we have hastily sketched be correct, it often involves a defect in mental character, for which our *materia medica* furnishes no specific remedies, and which will be likely to resist, in many cases, any moral influence which the physician is able to exert.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Statistics of Quackery in Mississippi. By DR. CARTWRIGHT, of Natchez, Miss.

We select the following extract from an interesting lecture by Dr. Cartwright, delivered before the students of the Medical Department of the University of Missouri, and published, entire, in the Missouri Medical and Surgical Journal, nos. for March and April, 1848.—*Ed. Buff. Jour.*

"It has been my lot, gentlemen, to witness three distinct eras in the practice of medicine in the State in which I reside, and now have a fourth era under my observation. The first, in which the doors were bolted and barred against empiricism by the strong hand of power—legislative enactments, though I cannot say I approve of that mode of excluding it, as I believe the light afforded by Statistical Medicine is much more effectual than any legislative enactments against it. The second era, when the whole State was open to quackery of all kinds, and no ray of light from Statistical Medicine had disclosed the fatal scenes which marked the footsteps of ignorant pretenders in physic. The third era, when quackery without any law against it, has died a natural death in that portion of the State where Statistical Medicine has been cultivated, being unable to dwell in the light which that department of our science affords; that is, open and undisguised quackery no longer flourishes therein. The fourth era, when it has assumed different coverings, pretended to be borrowed from science, called botanical or homœopathic: but time, in its progress, will ultimately strip these coverings off, by proving, by the unerring results of Statistical medicine, that what is called by this name or that, as a new practice, a revolution in medicine, is only an old thing under a new name—that is empiricism after all—and that the general result of such practice, in a series of years, must and will be, like all other species of empiricism, much more, so much more unsuccessful than the regular practice, as finally to be abandoned.

The first of these three eras, lasted from the year 1823 to the year 1834—ten years—when medicine was protected, and quackery put down, by legislative power. The second era, from 1834 to near the close of 1839—four years and nine months—being the time when quackery of all kinds was freely admitted into the State, under the sounding title of a reformation in medicine, and before a sufficient time had elapsed to test the result of the practice of the reformers by the facts afforded by numbers. The third era extends from late in the year 1839 to the summer of 1847. The fourth era, from the summer of 1847, is now under observation. Before the end of the year 1839, sufficient data had been collected, of unquestionable authenticity, to prove that during the four years and nine months of the pretended reformation in medicine, the mortality of the city of Natchez, in that short space of time, with very little increase of population,

had actually been greater than the total amount of mortality in the same city for ten years prior to the advent of the reformers. The records of the sexton's book gave a deadly wound to quackery in Natchez and its vicinity. So plain and convincing were the truths developed by Statistical Medicine, in that part of the State, of the terrible havoc and unnecessary waste of life, which had been caused, directly and indirectly, by unbridled empiricism, that the citizens petitioned the legislature for a special law to exclude it. Laws excluding it from Natchez and Adams counties, were accordingly enacted by the legislature.

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Permit me, gentlemen, now to make some remarks on the results afforded by Statistical Medicine, in the different eras above mentioned. In the first era, extending from 1823 to 1834—ten years—empiricism was excluded from Mississippi by the strong hand of legislative power. During that period, the annual average mortality of the whole population in the city of Natchez, including strangers, boatmen, and great numbers of negroes brought there for sale, was one in thirty, and not more than one in sixty of the citizens proper. Yet these ten years constituted a period rife with epidemic diseases. During this period, besides the diseases incident to the climate, the physicians had to contend with the small-pox, measles, whooping-cough, scarlet-fever, and Asiatic cholera, all in the epidemic form, and besides, with two epidemic yellow fevers. But they had no quackery to contend with. They had the confidence of the people. The venders, proprietors and pedlers of patent medicines and nostrums, had not destroyed that confidence, as they have since done, to open a market for the sale of their empirical preparations. The citizens of Natchez, leaning on the arm of science, under circumstances calculated to desolate and depopulate any place less fortunately supplied with skillful physicians, passed through a period of ten years, and actually lost a fewer number per annum, in proportion to population, than almost any other town or city from which we have any authentic records—the whole mortality among the citizens proper, not exceeding one in sixty, while the whole mortality, including strangers, was only one in thirty. The sum total of all the deaths per annum, occurring both among the resident and non-resident population, during the whole period of ten years, indicates a far less annual average mortality, than either Edinburgh, Dublin, Madrid, Amsterdam, Naples, Rome, Vienna, or France itself can boast of. This result may be accounted for, from the fact, that the citizens generally of Natchez sought medical aid very early in their disease, and all had the benefit of regular medical advice; whereas in France, and the cities just mentioned, only a small portion of the population, comparatively, have the advantages of regular medical attendance, and the necessary accompaniments of a well regulated sick room, from the commencement of their disease.

Let us now come to the second era, when the laws forbidding the empirical practice of medicine in Mississippi had been annulled under the new constitution, viz: early in the year 1834. No less than six empirics, under the name of reformers, soon afterwards, located themselves in Natchez. They endeavored to convince the people that the regular physicians were unworthy of their confidence; that the old fashioned ignorance of the regular physicians, (or mineral medicine doctors, as they called them)—ignorance disguised by technical terms in Latin and Greek, caused much

unnecessary mortality and greatly increased the amount of human suffering; whereas they, the reformers, had a new system of treating all diseases, much safer better, and *cheaper*, than the old method. They entered on the work of reformation, and the sexton's book proves, that no sooner did they enter on their work, than the mortality suddenly increased, from one in thirty, to one in twenty-one per annum, almost equal to the mortality among the free negroes in Philadelphia. In a time remarkable for its health, without any epidemic diseases to contend with, and omitting entirely every death which occurred of the epidemic yellow fever of 1837, Natchez, during a period of four years and six months, (omitting the three months of the epidemic,) lost sixty-two individuals over and above the sum total of all the deaths in the ten years preceding the advent of the reformers. It is true, the population in the second period was somewhat greater than that of the first, but by no means great enough to account for the increase of mortality. The exact population being known, and the number of deaths being also known, the evils of empiricism can be demonstrated with certainty, as likewise the beneficial influences of science in medicine. Thus in 1830, the exact population was known, from a census carefully taken that year. The mortality of that year, when the people were protected from empiricism, was only one in thirty-four. The annual ratio of mortality in 1837, when the population was known, from an accurate census of the inhabitants taken that year was one in twenty-four, for the nine healthy months, omitting entirely the three months of the epidemic. During the whole period of the reign of empiricism, from 1834, to near the termination of 1839, the annual average mortality, making more than due allowance for the increase of population, was about one in twenty-one per annum; whereas, before the introduction of quackery, it was only one in thirty, for ten years in succession. Lest it might be supposed that the comparatively small mortality of the ten years of the first period, when empiricism was excluded, might be owing to a greater proportional number of citizens leaving town in the summer, and likewise to a smaller number of unacclimated persons, it will be found on examination, that the mortality in January, February, March, April and May, for five years in succession, has been nearly twice as great, under empiricism, (making every allowance for increase of population) as it had been in the corresponding months for ten years under the regular practice. I do not attribute the whole of the increased mortality of the second period to the direct agency of the empirics themselves. The greatest part of it was doubtlessly owing to their indirect agency—making war against some of the best known and well tried remedies of the *Materia Medica*, and to the artful measures they took, in conjunction with the proprietors and venders of nostrums, to impair the confidence of the people in the regular medical profession. Distrust and want of confidence in physicians, will always increase the mortality among any people, by preventing timely application for assistance. Statistical Medicine, as gathered from the sexton's books of Natchez, proves that a large number of the deaths occurring during the reign of empiricism, were not reported by any practitioner whatever. The people being told that there were two systems in medicine—an old system, full of errors and dangers, and a new or reformed system—neglected, in many cases, to avail themselves of either, being doubtful which to choose.

About the close of 1839, after nearly five years had elapsed under the reign of quackery, called a reformation in medicine, I commenced a numerical analysis to test the results of the empirical practice. When completed, I called the physicians together and showed them the result. The numerical method declared that the mortality had nearly doubled under the pretended reformation in medicine; that is, it was nearly twice as great since the empirics came to town and opened their shops, as it had been during any portion of the preceding time when medicine was protected. I called for a committee to examine my data, to compare them with the sexton's book and the different censuses of the population, and to see if any error had been made, either in the statement of facts or the deductions therefrom, and to confer with the city council and the health officer, as also with the other officers of the city, in regard to the actual number of the population. The committee reported that the facts were true, and the deductions founded thereon were mathematically correct; that it was strictly true that the mortality, from the very first appearance of the reformers in Natchez, had nearly doubled the mortality previously—doubled in a healthy time with no epidemics to contend with; that the deaths occurring in the only epidemic which occurred during the reformation, had not been taken in the calculations at all; while all the deaths occurring in two epidemic yellow fevers, two epidemic choleras, and one epidemic scarlet fever, measles, whooping-cough and small-pox, which afflicted Natchez previously to the advent of the reformers, had been included in the mortality of that period when medicine was solely in the hands of the regular physician. Yet the mortality of this period, so rife with epidemics, was scarcely half as great as the mortality of that period when quackery was the only epidemic which prevailed. The prevalence of quackery, therefore, had been more fatal to the citizens of Natchez, nearly two to one, than the prevalence of the yellow fever, cholera, measles, whooping-cough and small-pox, and all other diseases put together. These facts were embodied in a discourse before the Natchez Medical Society, and Dr. Yandell procured a copy from me, and published it in the Louisville Medical Journal. No other Journal took notice of it, and no other publication was made of it, physicians being averse to using the public press. Nevertheless the citizens of Natchez found out that the result of introducing quackery had done no other good than nearly to double their mortality, and had made Natchez in a healthy time, more fatal to human life than it ever had been before the introduction of empiricism in the most sickly times. They therefore petitioned the legislature to exclude it. As soon as the empirics found that the truth was against them, and that instead of their practice curing every thing, it had been about twice as fatal as the old practice, and that the citizens had begun to find it out, they began, one by one, to exclude themselves, that is, to back out, and leave the field to the physicians again. Their practice rapidly declined and that of the physicians increased, by the end of the year 1839. From that time the third era commenced, when quackery began to die a natural death under the light of statistical medicine, and soon became almost totally extinguished. As quackery declined, the mortality diminished, and Natchez became once more a healthy city as the sexton's books will prove. In the summer of 1847, however, after the old fashioned, undisguised quackery had died out, one of the old physicians who had gained a high reputation from a liberal and

early use of quinine in malarial diseases, introduced empiricism again in Natchez, dressed in the disguise of science, under the new appellation of Homœopathy. From the summer, therefore, of 1847, the fourth era begins. Sufficient time has not yet elapsed to test the results of the practice by the unerring results of Statistical Medicine.

On the Diagnostic value of Expectoration and Pain in Pulmonary affections. By Prof. ANDRAL.

Let us now enquire into the diagnostic value of expectoration in various maladies.

In acute laryngitis, simple or puriform mucus may be rejected: when a certain quantity of pus is suddenly thrown up, it points to a submucous abscess of the larynx; false membranes secreted in the larynx may also be seen, as in variola, for instance. In chronic laryngitis, blood, expectorated in small quantities, indicates an ulcer of the mucous membrane; if the amount of blood be at all considerable, its source is not in the larynx. A chronic form of croup has been described in which the patients cough up false membranes, and this circumstance often exercises a most favorable influence upon the progress of the malady. Polypous concretions, and vegetations formed in the laryngeal cavity, have been rejected; also pus from an abscess developed in the organ, as in a case published by Dr. Pravaz, of Lille: a tumour, soft and fluctuating, had been previously recognized by the introduction of the finger, and disappeared after the sudden expectoration of a certain quantity of purulent matter, with which two small concretions were also thrown up. The same author relates in his inaugural thesis a case in which two hydatids were found in the ventricles of the larynx, but we have never ourselves observed any instance of the kind.

Acute bronchitis is not in its first period attended with expectoration; but, as the disease progresses, the cough becomes loose; and a colorless, transparent mucus, more or less viscid in its nature, is rejected, occasionally streaked with blood if the cough be violent. This matter gradually becomes less transparent, and acquires a puriform appearance, decreasing at the same time in abundance, in proportion as the case progresses towards a favorable termination. In some patients the expectoration is puriform from the first, in others it never assumes that character. Occasionally, even the cough is dry from the beginning to the end of the disease. In chronic bronchitis, the expectoration usually consists of a slimy fluid, more or less puriform in appearance: when dyspnoea is present, this matter is very viscid, and generally spumous. It is sometimes constituted by a homogeneous liquid, which bears the greatest resemblance to the expectoration in consumption, from which neither chemistry nor the microscope can distinguish it. The abundance of the rejected fluids may be very considerable, particularly in the aged, the general condition of the system suffering at the same time much less than it would, *a priori*, seem rational to suppose. The odor of the matter is not characteristic, and may accidentally acquire great fetidity. In some cases of chronic inflammation of the bronchi, no expectoration is observed; in others a peculiarly granular mucus is thrown up, which has a remarkable tendency to solidity; and in both these cases, pulmonary emphysema often follows bronchitis.

During the first two days of pneumonia, characteristic expectoration is seldom noticed, but after this period the rejected matter is viscid, transparent, spumous, and rusty in color; as the disease advances, the fluid becomes darker and less frothy, and gradually resumes its natural hue if the malady terminates favorably; if, on the contrary, it becomes darker and more viscid, or brown, and more fluid, the prognosis acquires greater gravity. It has been often said that where the colour of the expectoration resembled that of the juice of stewed prunes, the circumstance indicated diffused suppuration of the lung; we believe that it points more to increased severity of the case than to that particular fact. In the aged, the expectoration is often of a reddish grey, and may completely be suspended some time before a fatal issue, either from a real cessation of the morbid secretion, or more frequently from loss of power to reject it. In the pneumonia of children no expectoration takes place, and when this disease is a complication of other ailments, consumption for instance, the rejected matter is often deprived of its characteristic appearances. M. Remack, of Berlin, states ("Archives," January, 1846), that in the expectoration of pneumonia, small concretions are rejected, constituted by fibrine, and incarcerating purulent corpuscles in their network; the shape of these concretions is the same as that of the bronchi: we have several times assured ourselves of the accuracy of this observation, which may assist considerably the diagnosis of doubtful cases. Chronic pneumonia presents no special expectoration.

(Edema pulmonis and emphysema are not attended with any characteristic appearances in this respect. At the beginning of attacks of asthma, the expectoration is usually suppressed, and returns at the close of the paroxysms. Pulmonary apoplexy usually causes hemorrhage and the rejection of a small quantity of blood, but not constantly. In gangrene of the lung, the sputa are thin, dark, and extremely fetid.

Pulmonary consumption at its various periods occasions an expectoration, the characters of which it is important to be well acquainted with. Mucus, pus, blood, concretions, &c., may be rejected, and their relative signification should be clearly understood. During the first period of phthisis, the cough is frequently dry, or followed merely by the expulsion of pure mucus; blood is often rejected at this period, with the characters which we have elsewhere described. Calculi, also, may be expectorated, formed of crude tubercular matter. When softening occurs, the appearances are usually those observed in bronchitis, the sputa being sometimes streaked with a substance of a yellowish, dead-white color, supposed to consist of detached tubercular secretion: also, occasionally granular agglomerations of tubercle are found floating in the mucus; hæmoptysis may occur at this stage; but when cavities have formed in the lung the appearances are more characteristic. A large tubercular mass may be expelled suddenly, but in general its elimination is gradual. The discharge is thus formed of three parts, viz: bronchial mucus, tubercular matter, and a purulent fluid secreted by the walls of the accidental cavity. According to the relative proportions of these three elements the expectoration varies in its characters. In most subjects it separates into two layers—a semi-transparent, gummy fluid, and a more opaque, solid matter. The latter may be suspended in flakes, or float on the surface of the fluid in small round patches (nummular expectoration.) At a still later period of the disease, the semi-transparent matter is no more to be found, and the matter consists merely of a thick, purulent fluid. At this stage of

phthisis, hæmoptysis is more rare than in the first periods. The odor or taste of the expectoration are not characteristic, in spite of the Hippocratic aphorism, that in consumption it is at first salt, and afterwards sweetish. The quantity rejected varies greatly, not only in several, but even in the same individual. Shortly before a fatal termination the expectoration may be suppressed, or become looser from the enlargement of the caverna. Microscopic examination shows in the sputa of consumption the presence of pus and blood corpuscles, of epithelium, of false membranes, and of pulmonary tissue. When a piece of tubercular lung is examined with the microscope numerous corpuscles can be seen, with the particular form described in the first series of these lectures. But it is very uncommon to meet with these special granulations in the sputa, being, as it would seem, dissociated before they are expelled from the chest by the efforts of coughing. It has been said, and it is quite true, that tubercular sputa sink in water, and burn with a flame when desiccated; but these characters cannot distinguish them from the sputa of bronchitis, because they result from the presence of pus, which may exist in one disease as well as in the other.

When hydatids form in the pulmonary organs, they may be expelled by expectoration. The sputa of cancer of the lung are said to resemble gooseberry jam in color and consistency, but this fact requires further confirmation.

In diseases of the pleura, the expectoration is usually absent, or resembles that of bronchitis; but pleuritic effusions may suddenly be discharged by the bronchi, after ulceration of the surface of the lung. True pus is thus rejected, and penetration of air into the pleuritic cavity soon communicates to its contents a fetid alliaceous odor. The consecutive discharge may continue for a considerable time, and may be recalled after temporary cessation by change of position of the subject, by which a change is also effected in the relative situations of the pleuritic effusion and of the pulmonary fistula. Even after long duration, these cases are susceptible of recovery.

In diseases of the pulmonary organs, the sensibility of the patient may be modified, and furnish signs for the diagnosis.

Many acute or chronic diseases of the larynx may exist without pain, and present a striking contrast between the great change of the voice and the total absence of suffering. When pain accompanies ulcers of the larynx, it is more marked when the sore occupies the vocal chords, or is situated above them, than when it is placed below the ventricles. Affections of the trachea are seldom painful. Acute bronchitis is usually attended with a distressing sense of heat within the chest, which increases with the cough, or with the inspiration of cold air. This pain may occupy the sternal region, or be complained of between the shoulders. Pneumonia like other inflammations of parenchymatous organs, is seldom of itself a painful disease. "Pulmonum inflammatio," says Boerhaave, "plus affert periculi quam doloris;" a perfectly accurate remark, the stitch in the side, which so usually accompanies pneumonia, being in most cases due to pleuritic complication. Many consumptive patients suffer very little, others, on the contrary, are frequently troubled with pain, due to the participation of the pleura in the disorder—a fact demonstrated by the adhesions found within the thorax of these subjects on *post-mortem* examination. Some patients feel a sort of tightness round the chest, and are fully aware, from the nature of the sensation, that their respiration is not complete; in others a

sense of uneasiness is complained of in the superior part of the chest; and in these cases, on dissection, caverns are often found in these regions, separated from the pleura by very thin walls. Occasionally percussion of the chest, and even auscultation with the stethoscope, cause pain in phthisis. Pain between the shoulders is very generally looked upon as a sign of consumption; we believe that the importance of this symptom has been much overrated; it seems to us to be merely a muscular pain, due to debility, and observable in most cases of chronic disease; it is, for instance, almost constant in chlorosis. Hydatids and cancer of the respiratory organs are productive of suffering only when the pleura is affected. Acute pleuritis seldom exists without pain; its intensity is variable from a trifling to a most intense stitch in the side. It is usually seated below the breast on the affected side, and increased by motion, pressure, cough, or inspiration. It may extend to the whole thoracic wall, or be limited to the cartilaginous edges of the ribs; in diaphragmatic pleurisy, it spreads to the epigastrium, and even to the abdominal parietes. An ingenious explanation of this pain has been offered by Dr. Beau, and seems confirmed by anatomical investigation. That gentleman attributes it to inflammation of the intercostal nerves, which, in the posterior third of their course, lie in close apposition with the pleura. Irritation of a nerve, causing pain to be felt in the region of its terminal distribution, excitement of the posterior part of these nerves in pleurisy, naturally occasions a suffering which is referred to the anterior region of the thorax, immediately below the breast.—*Jour. Med. Times. Reported by Dr. McCarthy, Paris.*

Recovery from a poisonous dose of Strychnia.—Dr. Thomas Anderson records, in the *Monthly Journal and Retrospect of the Medical Sciences*, a case in which seven grains of strychnia were taken without producing fatal consequences. The subject of the case was a gentleman who had long suffered from tic douloureux, for the relief of which he was in the habit of taking muriate of morphia, in increased doses, until three and a half grains were necessary to produce its effect. Having occasion to go a short distance in the country on business, he took, previous to setting out, his usual dose, three and a half grains of strychnine, given him by an apothecary by mistake for muriate of morphia, which he placed on his tongue and swallowed;—he remarked at the time that it was extremely bitter, and that the taste was more than usually persistent, but it did not occur to him that anything was wrong. Shortly after, however, while walking along the street, he felt slightly indisposed, the most prominent symptom being a sense of numbness in the back of the legs, which he attributed to the effects of cold, to which he had been exposed in the early part of the morning. As these symptoms did not appear of any importance, he proceeded by a public conveyance to the village where his business lay, and returned by the next opportunity. During the whole of this time the symptoms remained precisely as they were the moment he first observed them; but as he was walking along, on his return, they suddenly increased, the numbness being accompanied by a sense of want of power, and a sort of dragging of the muscles of the legs, which soon became so great, that, as he describes it, he had to put his hands at the back of his thighs in order to push his

legs along. This occurred at nearly two and a half hours after he had taken the dose of the supposed muriate of morphia, and, at this time, there could have been nothing remarkable or unusual in his appearance; for, on his way home, he met a friend to whom he communicated his sensations, but who laughed at his evident apprehension, and assured him that it was all imagination. As he was in the midst of describing the effect upon his muscles, and bending himself so as to show how it occurred, he suddenly overbalanced and fell heavily backwards. He was immediately raised, and, on attaining the upright position, he felt himself much in the same state in which he was before, excepting that he was excessively nervous and alarmed. The want of power in the legs did not at all increase in intensity, and no spasmodic affection was observed, although the patient was himself under the impression, that his fall was somehow connected with the previous symptoms.

The patient's fall and the nervous state into which he had got, now fairly alarmed his friend, who begged him to get home as fast as possible, and accompanied him on his way, as he experienced considerable difficulty in walking, and could not get on without support. On reaching home he felt somewhat better, and remained sitting for some time, and at length retired to bed, about five hours after the first appearance of the symptoms. Just previous to stepping into bed, in order to insure a good night's rest, of which the recent symptoms rendered him somewhat doubtful, he took a second dose of the powder, equal in amount to the first. In less than ten minutes after, he was seized with a violent tetanic spasm, affecting the legs and muscles of respiration, and had only time to call out for assistance before the sensation amounted to that of absolute suffocation. Fortunately, assistance was close at hand, and he was immediately raised up in bed, with the effect of entirely relieving the sense of suffocation, and a medical man sent for. Spasms now followed each other in rapid succession, the intervals being about a quarter of an hour or twenty minutes, and the affection was confined principally to the legs, back, and respiratory muscles, the arms being comparatively unaffected. The numbness and dragging of the muscles, which had been continuous during the first five hours, disappeared entirely during the intervals of the spasms, and the patient was left without any uneasy sensations, excepting the exhaustion of the previous fits and the apprehension of its successor. During the whole of this time he was not only perfectly conscious, but his senses were preternaturally exalted, and he distinctly heard a variety of whispered observations of the physicians and his friends, which, from their tenor, were obviously not intended to reach the ears of the patient.

The paroxysms, after continuing for some time, began gradually to diminish in violence, the intervals becoming longer, and the duration of each spasm shorter, and it was hoped that they were about to pass off, when all at once they returned in their original violence. This proved, however, to be the last expiring effort of the poison; for the symptoms now entirely ceased, about thirteen hours after the first dose was taken. At the conclusion of the spasms, the patient was left in an excessively exhausted state, and was unable to turn himself in bed; from this, however, he recruited with great rapidity, as he was able to get up on the evening of the next day, and on the second he walked out and went about his usual business. The most

remarkable fact connected with the case is, that, from that time the attacks of tic douloureux entirely ceased, and he has not since had any return of it. The medical treatment employed in the case was unimportant, and had not any effect on the progress of the symptoms.

Case of Quadruplets, by W. W. Welch, M. D.—We find in the *Illinois and Indiana Medical Journal*, the following extract from a letter by our friend, and quondam pupil, Dr. Welch, addressed to Dr. Brainard, detailing a case of Quadruplets. Dr. W., who has numerous friends in this city, is settled at Inlet, Illinois, and, as we are gratified to learn, is on the high road to professional success, to which his talents and character justly entitle him.—EDITOR BUFFALO MED. JOUR.

Day before yesterday, (20th,) I had just left the house where I had attended a case of childbirth, when I was called in another direction. The woman was but seven months advanced, and my advice was sought rather on the account of extreme anasarca of the legs and thigh, and great cedema of the labia pud., than in expectation of my services being needed obstetrically. She, however, was beginning to have premonitory symptoms of approaching labor, and I disposed myself accordingly; thinking the labia might suffer injury from the passing of the child, I made a number of small punctures with a lancet in each, by which the swelling was reduced, and a large quantity of serum evacuated during the course of labor. The abdomen was enormously enlarged, and the labor was slow, lasting some twenty-four hours. It had been apparently near its termination for several hours, when two fetuses, in appearance of about six month's growth, were suddenly expelled. One was in a state of incipient putrefaction, and the other barely showed signs of life. Soon after, in searching for the after-birth, my fingers met a very large watery cyst, which as contractions proceeded, was soon ruptured, and an apparently seven months fetus was delivered by the feet. It was inanimate and there was no pulsation in the cord; but artificial respiration being instituted, it was after a time resuscitated.

Making still another examination after the lapse of a few minutes, the head of a *fourth* child was found to be rapidly advancing, and it was soon in this vale of tears. (I had to laugh, when the woman asked me if I thought that was the last one.) It was more vigorous than the other, and the cord pulsated strongly. The two double placentæ were then extricated; the last adhering slightly, it being necessary to detach it carefully with the fingers.

There was some hemorrhage, but it was speedily arrested, and the woman was "comfortable and happy" when I left her yesterday.

The two first born were girls, and the two last boys.

Remarkable Case of Constipation.—The following case is communicated in a letter to the editor of the *Boston Medical and Surgical Journal*. As the town where the patient is said to reside is in this neighborhood, we should be glad to have some farther particulars from some of our professional friends and subscribers residing on the spot.—ED. BUFF. MED. JOUR.

SIR—While in Western New York last summer, I saw a remarkable case, in the person of a young lady, who has had but three fecal discharges in nine years; and thinking the statements in full might be interesting, if not useful, to the medical profession, I now communicate them.

The patient's name is Ellen R. Allis, daughter of Joel Allis. She lives about three miles from the centre of Batavia. When about twelve years of age, she attended a singing school, and being ensnared in a trap made by a rope by some boys, was thrown down, and her spine injured. She became quite sick, went to her bed, and there has remained up to the present time, perfectly bed-ridden. She is now twenty-one years old. She lays in her bed, her body being at an angle of forty-five degrees with her extremities; nor can she be removed from that position without producing intense pain, and much dyspnoea.

From her waist down there has been no increase in size since her first injury; but above the umbilical region, she has grown like other girls. She is wonderfully intellectual for one thus circumstanced, and has shown a remarkable skill in the formation of different curiosities.

As you would naturally conclude, she has but little physical strength. Her heart beats like an infant's, her respiration is peculiar, and so slight is the effort, that it is hardly distinguished by a careful observer.

Two days previous, and about three days after, the movements of her bowels occurred. she was perfectly insensible, and in a comatose state. About a teacupful of a thin viscid discharge come from her at each time.

There has been an attempt on the part of physicians in the region of Batavia to remove this difficulty, (whether it be a partial stricture of some portion of the intestines, or a want of action in them, is unknown,) but in vain.

Her diet is very light, consisting mostly of white sugar and tea, and occasionally a thin broth.

As you will understand, she has had but three stools in nine years. Oliver, in his Physiology, makes mention of some persons having no discharge in one year; but no instance like the above have I ever found recorded.

Yours respectfully,

Millbury, Mass., April 13, 1848.

CHARLES A. GREENE.

P. S.—If you wish any further information in reference to the above case, it may be obtained by directing a communication to me.

On the Discovery of a new Fluid for preserving the Colour of pathological and anatomical Preparations. By M. H. STAPLETON, M. D., F. R. C. S., M. R. I. A., Surgeon to Jervis-street Hospital.

Sir,—I beg leave to make known to the profession, through the pages of your Journal the discovery of a solution, which I have employed during the last six years, for preserving pathological specimens. It possesses the important advantages of causing such preparations to retain their colour perfectly unchanged, and it does not harden the substance immersed in it. These two results are well instanced in several preparations in Jervis-street Hospital,—in particular, preparations of the brain, showing apoplectic clot; apoplexy of the lung, and the recent appearances in stricture of the urethra.

The process I adopt is simply as follows:—In a quart of a saturated solution of alum in water I dissolve half a drachm of nitre; in this fluid I immerse the recent preparation, which soon becomes decolorized, but the colour gradually returns within a few days, the period, however, varying in different preparations. When the colour is thus completely restored, I put up the preparation in a filtered solution of alum. The specimens are open for inspection.

I remain your's, &c &c.,
M. H. STAPLETON
To the Editor of the Dublin Quarterly Journal, 16th Jan., 1848.

Death by the bite of a Rattle-snake.—Our readers have doubtless read notices of the melancholy circumstances attending the death of the late Dr. WAINWRIGHT, of the city of New York, which occurred several months ago. In a late No. of the *Annalist*, we find the following report of the particulars of the case, as communicated to the New York Medical and Surgical Society.—EDITOR *BUFFALO JOURNAL*.

Dr. Post mentioned some particulars of the late death in this city by the bite of a rattlesnake. The patient, a large well built man, 40 years of age, was bitten in the last phalanx of the middle finger of the left hand, near its articulation with the metacarpal bone. At the time the wound was made, a bystander observed that it was immediately followed by a small jet of blood. It was immediately sucked, and soon afterwards, less than half an hour, an attempt was made to excise it, and the excised surface was cauterised. From the nature of the parts involved in the wound, the incision must have been very imperfect. A ligature was likewise tied firmly about the wrist, and 10 grs. Carb. Ammon. and $\frac{1}{2}$ gr. Sulph. Morph. were administered. About 7 $\frac{1}{2}$ P. M., the ligature, after it had been on half an hour, was removed. Previous to this time the hand had been very much swollen, but no swelling had occurred above the ligature. It now began to extend up the arm. At 9 $\frac{1}{2}$ the patient was seen by Dr. P., and soon after by Dr. Parker; he had been visited by Dr. Cadwell previous to either of the other gentlemen being called upon. The swelling had now extended to a point half way between the elbow and shoulder-joint; it was very considerable, hard, and terminated abruptly—the finger, when passed along the arm, dropping suddenly from the swollen part to that in its natural condition. The hand was of a dark greenish colour, the lower part of the arm was mottled blue and greenish yellow; the discoloration did not extend as far as the swelling, and seemed to follow the swelling at about half an hour's interval.

At the time Dr. P. first saw the patient his pulse was 80, of medium fulness and strength, his face was flushed, and his manner excited. Half an hour afterwards the pulse began to flag, becoming less full and forcible, but increasing in frequency to 100; it afterwards reached 120 beats in the minute, but this was its maximum in frequency, becoming constantly more and more feeble. By 11 o'clock, the pulse was extinct at the wrist, but could still be felt at the groin. Between 10 and 11 he became stupid, taking no notice of what was passing about him. This lapsed into complete coma, and he died a little past 12. By this time the swelling had

extended under the pectoral muscle, and the discoloration had reached the axilla.

The treatment, after Dr. P. saw the case, consisted in the administration of stimulants (brandy and Carb. Ammonia) in as large doses as the patient could be prevailed on to swallow. When they could no longer be given by the mouth they were administered by the rectum. It is somewhat remarkable that after the pulse had ceased at the wrist, and the surface had become covered with a cold perspiration, a sinapism applied to the epigastrium produced full redness in 25 minutes.

The snake had been brought from Alabama, and it was taken just before the accident from on shipboard, where it had been confined for a month. It was a large one, having 12 rattles, indicating it was 13 years old.

DR. ADAMS stated, that in the cases which he had seen recorded a rapidly fatal result had only taken place in those in which a vessel seemed to be opened into.

DR. CLARK thought that a fatal result was exceedingly rare from the bite of snakes natives of the Eastern States, or of New York, states in which the rattlesnake never attains a very large size. In one instance, a man who kept these animals for exhibition, frequently having 50 in his possession, said he had been often bitten, but that he possessed a remedy which always cured him. He was at last bitten by a large one, and died in 4 hours. Dr. Clark stated, in experimenting with animals, he had frequently cauterised the bite of the animal immediately with Ammonia, entering the wound with a fine pointed syringe, and throwing in Aq. Ammon. Fort., but the animals (cats and rabbits) invariably died. The cat is affected in a singular manner by the bite of the rattlesnake, springing up convulsively 4 or 5 feet into the air, and on falling driving her talons forcibly into the floor; this would be repeated four or five times before the animal became insensible. In man the poison seemed to attack especially the subcutaneous cellular tissue; the sloughing which takes place when patients recover being superficial. From the discoloration following the swelling at so marked an interval it would seem that the skin was only secondarily attacked.

Several of the members alluded to the fact, that when a number of small animals were bitten by the same snake in quick succession, those bitten last generally escaped, whilst the first died. Dr. Metcalfe stated that, during his residence in Mississippi, though he had heard of a number of instances in which bites had been received, death had followed in only one case.

EDITORIAL DEPARTMENT.

BIBLIOGRAPHICAL NOTICES.

Several new publications have lately been received. Of some of these our notice at this time is intended merely as a matter coming under the head of medical intelligence, not precluding thereby, critical or analytical reviewal hereafter, should it be deemed advisable.

Lectures on the Theory and Practice of Physic. By JOHN BELL, M. D., etc., and WILLIAM STOKES, M. D., etc. Fourth Edition, Revised and Enlarged. 2 volumes. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1848. 8 Vo. pp. 976.

It is unnecessary to speak of the character of this work, as it is one with which the medical profession of this country are sufficiently acquainted. The present is the fourth edition, which has been carefully revised, and enlarged by the addition of new and useful matter. Since the portion contributed by Dr. Bell already considerably exceeds that taken from Dr. Stokes, and is increasing with each new edition, we hope that, by and by, the work will become exclusively a work by Dr. Bell. We make this remark without wishing to be understood to depreciate the valuable lectures by Dr. Stokes, for this would show as little discretion as discrimination. But, we confess, such partnerships are not to our taste. Dr. Bell has certainly demonstrated his ability to prepare a work on practice which shall prove satisfactory to the profession: let us then have *Bell's practice*, as an American work, leaving (to use a homely phrase, which we trust the fastidious reader will excuse) "every tub to stand on its own bottom."

On Poisons, in relation to Medical Jurisprudence and Medicine. By ALFRED S. TAYLOR, F. R. S. etc. Edited, with notes and additions, by R. EGLESFELD GRIFFITH, M. D. Philadelphia: Lea and Blanchard. 1848. 8 vo. pp. 687.

The object of this work is to present a more extended view of the subject of Toxicology, than is contained in works on Medical Jurisprudence. Dr. Taylor is well known as author of a valuable treatise on the latter subject. The present volume is published in a form corresponding to that work. In the words of the American Editor (whose name is a sufficient

guaranty of the value of the work) "it is an elaborate epitome of all that is known on the subject of Poisons, and is amply illustrated with cases, so as to exemplify the relative value attached by juries to the various symptoms induced by the respective articles; and also of the modes of detecting these articles, as given by the best authorities."

It must be an useful addition to the library of the Medical Practitioner.

Principles of Physics and Meteorology. By J. MULLER, Professor of Physics at the University of Freiburg. First American Edition. Revised and illustrated with 538 engravings on wood, and two colored plates. Philadelphia: Lea & Blanchard. 1848. 8 vo. pp. 635.

By the Publishers' advertisement, we learn that this Treatise is one of a series of valuable works now being issued in London; and that from its thorough character and extended range, it is much esteemed in England.

With reference to the subjects which it embraces, we quote the following from the preface by the London translator:—"The subjects of which this volume treats, are very numerous—more numerous, in fact, than at first sight it would seem possible to embrace in so small a compass. The author has, however, by a system of most judicious selection and condensation, been enabled to introduce all the most important facts and theories relating to Statics, Hydrostatics, Dynamics, Hydromatics, Pneumatics, the laws of the Motion of Waves in general, Sound, the Theory of Musical Notes, the Voice and Hearing, Geometrical and Physical Optics, Magnetism, Electricity and Galvanism in all their subdivisions, Heat, and Meteorology, within the space of a middle sized volume."

The mechanical execution of this work deserves mention, albeit it is from the press of Lea & Blanchard, whose publications, in this respect, are pre-eminently excellent. It is a beautiful book, calculated to adorn, as well as enrich the Physician's study.

Elements of Natural Philosophy; being an experimental introduction to the study of the Physical Sciences. By GOLDING BIRD, M. D., F. R. S., F. L. S. etc. With three hundred and seventy-two illustrations. From the revised and enlarged third London edition. Philadelphia: Lea & Blanchard. 1848. 12 mo. pp. 402.

A short extract from the Author's preface will explain the object and scope of the above work:—"The following manual is chiefly intended as a text book for the student, whilst attending lectures on Physics, or as preparatory to his entering upon the study of larger and more elaborate works. With this view it has been written; and as the great difficulty experienced in executing this task has arisen from the necessity of know-

ing, not what to insert, but what to omit, whenever a doubt has arisen on this point, it has been determined by a reference to the amount of knowledge required of the student, by the different English and Scottish medical boards."

The importance of the study of Physical science, as an element of medical education, is too obvious to require comment. If we mistake not, an elementary hand book, designed to introduce the medical pupil to this study, is a desideratum. In the high attainments of Dr. Bird, and his eminence as a teacher, we have an assurance of his ability to prepare a work which shall correspond with the present state of physical science, and be adapted to the particular wants of the Medical student. From a cursory examination of this publication we have no doubt that it is such a work as we should expect from the quarter whence it emanates, and we do not hesitate to recommend it to those for whose benefit it has been prepared.

On disorders of the Cerebral Circulation and of the connection between Affections of the Brain and Diseases of the Heart. By GEORGE BURNOWS, M. D., etc. With colored plates. Philadelphia: Lea & Blanchard. 1848. 8 vo. pp. 216.

We are glad to see a re-publication of this little treatise, having, previously, known somewhat of its character and contents, by quotations in some of the British periodicals. It will serve to correct some errors in pathology, which, from the sanction of high authority, had become somewhat current, and which were calculated to lead to serious errors of practice. It is gratuitous to remind our readers of the experiments of Dr. Kellie, which appeared to show that after animals were bled to death, the brain, instead of being found exsanguine, like the other parts of the body, frequently presented marked turgidity of the vessels. Upon these experiments, Dr. Abercrombie and others, based the hypothesis that the brain, being enclosed within a complete bony sphere removing it from atmospheric pressure, and the cerebral mass being incompressible by any amount of force which the heart and other forces carrying on the circulation can exert, the encephalic vessels must necessarily, not only be always full of blood, but that the quantity of blood within the cranium can neither undergo increase or diminution. The pathological and practical consequences of this hypothesis are at once apparent. It would follow, for example, that pathologists have been hitherto mistaken in attaching importance to an afflux of blood to the brain, as a morbid condition important in itself.

and still more important in its consequences. Dr Clutterbuck, indeed, in his article on apoplexy in the Cyclopaedia of Practical Medicine, states distinctly that the phrase "determination of blood to the head," a phrase so often in the mouths of practitioners, is without any meaning. It would also follow that the commonly received explanation of syncope, is erroneous; and, what is of immense consequence, vascular depletion, according to this view, becomes, comparatively, an inoperative method of treating those cerebral affections in which it has heretofore been esteemed to take precedence of all other therapeutical measures. That such an hypothesis should ever have been maintained by so accurate an observer, and sound thinker as Abercrombie, is truly surprising, and serves to illustrate the danger, from which the greatest minds are not exempt, of being betrayed into hasty conclusions which are at variance with the plainest and most familiar facts. Putting aside the fallacy of reasoning, and the errors of physical science, which such an hypothesis involves, the evidence afforded by a few autopsies of patients dead with different diseases, is unequivocally opposed to the doctrine referred to, and must satisfy any unbiased observer, that error must be somewhere involved in Dr. Kellie's experiments. Dr. Burrows has repeated these experiments several times, with different animals, and arrives at results directly opposite to those just mentioned. These experiments are detailed in the work before us.

They consist in destroying animals by strangulation, and by bleeding *ad-mortem*, and in suspending the bodies directly after death, in some instances by the heels, and in others by the ears, etc. Examination of the brain, under these different circumstances, demonstrated that its vascularity was thereby differently affected in a notable degree. Dr. Burrows also shows by an analysis of Dr. Kellie's experiments, that they do not justify the conclusions which have been deduced from them.

That the circulation within the cranium, however, is subject to peculiarities which do not apply to any other part of the body, is an important fact which is not to be overlooked. It is a fact involved in some pathological conditions, which can only be understood, and properly managed, by reference to it. That the brain is removed from atmospheric pressure, except in so far as the latter is exerted upon it indirectly through the vascular system, by acting upon the surface of the body generally, is probably true; and in consequence of this physical fact, the encephalic vessels must necessarily be affected by circumstances which influence the forces carrying on the circulation generally, less readily, and in a less degree, than other portions of the organism. Hence, upon the principle of the syphon, when blood is

not transmitted in sufficient quantities through the arteries to the brain, it is, by way of compensation, retarded in its passage from the brain through the veins. This explains the occurrence of cerebral congestion, in other words venous stagnation, in anæmia, and whenever the action of the heart, from any cause, is weakened so as not to carry on the circulation with normal vigor. It is well known that congestion of the brain, and even apoplexy, may be produced by causes just alluded to. This important pathological principle is involved in the development of coma in various diseases, such as cholera infantum, fevers, &c. The practitioner cannot with safety to his patient loose sight of this principle. This, however, is very far from admitting the doctrine that the quantity of blood within the head admits of neither increase nor diminution. While Dr. Burrows satisfactorily refutes this doctrine, he does not appear to us to attach sufficient practical importance to the physical considerations just adverted to. Dr. B. lays great stress on the effect of vascular pressure exerted by the blood, and by varying conditions in quantity of the cerebro spinal fluid. We are disposed to differ from the author as respects the latter point. Many of the pathological results which he attributes to modifications of pressure, seem to us rather due directly to stagnation of the circulation in the encephalic vessels, in other words, to the presence of unoxxygenated blood, in an undue relative proportion.

The subjects to which the foregoing remarks have reference, are treated of in the first section of the work. The second section treats of the "*connection between affections of the brain and diseases of the heart.*" The knowledge of the existence of such a connection is one of the developments of Modern Medicine. Until quite recently it was entirely overlooked. The observations of Bouillaud, Hope, Latham, and others, have established the very frequent dependence of the former upon the latter. Dr. Burrows has collected, from various authors, 132 cases of apoplexy, or sudden hemiplegia, with reference to the co-existence of cardiac disease. Of these, 84 presented disease of heart. The inference is "that in any given number of cases, of apoplexy and sudden hemiplegia, no less than three-fifths will present unequivocal signs of cardiac disease; either hypertrophy, dilatation, valvular disease, or some combination of these lesions."

The affections of heart most frequently found in this connection are hypertrophy and valvular disease combined, although, not unfrequently, simple hypertrophy, and valvular disease without hypertrophy, are thus associated.

Dr. B. adduces statistics to determine the periods of life most prone to apoplexy and hemiplegia. He infers from data which he presents, first, that "the relative frequency of apoplexy steadily increases from 20 to 80 years of age," and, second, "that the actual number of apoplectic cases increases in each successive decennial period upwards from 20 to 70 years, of age, while the number living gradually diminish."

After some practical observations on the treatment of apoplexy, &c., the author passes to notice some, "*affections of the brain and spinal cord depending on acute diseases of the heart.*" It is a curious and important fact that cardiac inflammation sometimes occasions phenomena referrible to the brain on nervous system, simulating various affections, which render the disease of heart liable to be overlooked by the practitioner. The author cites cases in which apparent inflammation of the brain, nervous irritation, insanity, chorea, tetanus, etc., occurred in connection with pericarditis, the local symptoms of the latter being so merged in the former, that the true disease passed undetected. These cases are highly interesting, and enforce valuable lessons of diagnosis.

In concluding this notice, it is superfluous to add, that Dr. Burrows' work in our opinion, contains much useful matter in a small compass, and that we cordially commend it to the medical reader.

Practical Observations on Certain Diseases of the Chest, and on the Principles of Auscultation. By PETER BLAKISTON, F. R. S., etc., etc., Philadelphia: Lea & Blanchard. 1848. 8vo. pp. 884.

The first 80 pages of this work, are devoted to the theory and practice of Auscultation. About the same number of pages are appropriated to the consideration of Thoracic Aneurism. Chronic Heart diseases are considered next in order, occupying about the same space. Next, Chronic Pleurisy, 28 pages. Next, Plastic Pneumonia, 21 pages; and, lastly, Phthisis Pulmonalis, 55 pages. It will be perceived, as the title page also intimates, that the work does not profess to be a comprehensive treatise on Pulmonary Diseases. The affections which are treated of, are illustrated by numerous cases that have occurred under the author's own observation. Indeed the work consists, chiefly, of facts illustrating the history, diagnosis, pathology, etc., of the particular affections treated of, derived from the author's experience, which appears to have been quite extensive. We have perused the work with pleasure and profit, and consider it a valuable contribution to the literature of Pulmonary diseases.

The Young Stethoscopist; or the Student's Aid to Auscultation. By HENRY J. BOWDITCH, M. D., one of the Physicians to the Massachusetts General Hospital. Second Edition. New York: Samuel S. & William Wood, 261 Pearl St. 12mo. pp. 303.

The first edition of this work appeared in 1846, and was noticed at some length in this Journal, (vol. 2d.) In the opinion which we then expressed of the character of the work, we have been sustained by the favor with which it has been received by the Profession, and the call for a second edition. The author was attacked in one of the last numbers of the British and Foreign Medical Review, by an anonymous reviewer, on the score of having appropriated from the works of others on the same subject—a charge as ridiculous, as unmanly. A singular occasion for reproach, truly, that the author of an elementary treatise on Auscultation has gathered important principles from various sources!

A writer of this day, may fail to add newly developed principles to those which the science of physical exploration already embraces, or to disprove principles which have become firmly established, without affording just occasion for complaint; and if he succeed in so adapting present knowledge to the mind of the student, that it will be more clearly appreciated in its important practical relations, he certainly is entitled to the credit of having done the 'state some service.' We much doubt if the late editor of the British and Foreign Review, (who, by the by, was British Editor of Laennec's treatise,) can designate a British work which is less obnoxious to the charge of want of originality, than that by Dr. Bowditch. We fancy he would find it equally difficult to select a British work, similar in its scope, which is so well adapted to fulfil the objects for which it was prepared.

We repeat here, what was said in our former notice, that we should be better pleased with the work if it embraced the complete diagnosis of diseases of the chest, associating symptoms and signs, which, in our opinion should not be dissevered in books, more than in practice. We would also again express the hope that Dr. B. may be induced hereafter to extend the scope of the work, and thereby increase the obligation under which he has already placed the profession.

Notes on the Theory of Human Existence: comprising remarks on *Vitality*, the *Mind*, and incidentally the *Soul*. The whole being an exposition of the *Nature, Powers and Destiny of Man*. By THOMAS L. WRIGHT, M. D. Publishing Agents, Robinson & Sons, Cincinnati, Ohio: 1848.

A 16mo. pamphlet containing 37 pages, for which we are indebted to the author, now lies on our table, bearing the above promising

title. As the author claims so little space, in this book-making age, for so extensive a theme, we were induced to climb the ladder of our hope anew, accepting his promised aid in solving the riddle of our being. Enlisting readily in the enterprise, and, passing the Preface, at once we come to the Introductory Chapter, which treats, in the first place, of the Elements of Human existence; therein we are told that

"Physical Life, a Mind, and a Soul, embrace all that is essential to the idea of humanity. * * * The progress of science reveals to man how narrow are the boundaries to his knowledge. It displays new and broad fields of inquiry concerning the intimate nature of Agencies; silent and *mysterious* in their operation, producing results wonderful and magnificent, though common and familiar to all. In pursuing such inquiry, however, the mind speedily encounters obstacles which it *cannot surmount*. To comprehend the intangible, imperceptible agencies in operation about him; to know the Mysterious, the Infinite, the Eternal, is the ardent, constant desire of man. To accomplish it he spends wealth, and toil and years; he puts in requisition the mightiest efforts of his mind; he studies, reasons, ponders. Imagination, taxed to her utmost, wings her highest, proudest flights—but Time, and Wealth, and Intellect fail, and the delusive images of imagination and fancy, satisfy not the longings of the hungry soul. While the chains of mortality bind the mind to a corruptible, changing body, *man never can attain to such knowledge*. Fetters which he cannot shake off, weigh down his efforts, *a dim mist obscures his vision, yet rolling, changing, varying always*. Sometimes, almost, he thinks he can see the brightness of day; he can almost strain his fettered arms to the object of his desires; but—no! he is *blind still, bound still!*"

Having read the Title, a thermometer at fever heat, we are suddenly plunged into this Introduction, a zero, below the freezing point; and, having escaped the Russian bath, we were not a little staggered by the reaction to our hopes which had been set up. But we have persevered—read the pamphlet, been gratified, and passed more gradually through the stages of our first plunge, and finally came to this conclusion:—Our author is skilled in the trade of book-making, in so far as he commenced with his Title, wrought out his Text, and thereafter wrote the Conclusion, which by transposition or design, has found place as an Introductory chapter. And, though a little staggered at first, we finally, while considering the theme, in connexion with those who have gone before, yield to his statement that "history teaches that the Intellect is the same forever." "Man does not live for posterity" and that "consequently man's *destiny* cannot relate to others but himself—He lives for himself alone," p.9. Hence we hear our author—

"With regard to the connexion of mind itself, and its instrument, nothing is known. * * * Viewing the subject subordinately in its instrumentalities, it would seem as though the *whole world* was created to furnish

the conditions of the existence of the mind in the human body, through the instrumentality of the nervous system, that *all things* exist for the perfection and complete development of the nervous system in man." p30.

"That mind has not increased the smallest iota in strength and capacity." in some quarters, we feel assured, for, before this, man was heard to exclaim,

"See *all things* for my use,"

"See man for mine" replied the pampered goose."

Willingly we stand aside and leave to these pre-occupants the field for debate.

Prof. Mussey, now of Cincinnati, was wont to relate that a college friend of his chose for a graduating theme "On the adaptedness and fitness of things." What *clat* he obtained, in its treatment, we are not informed, but the title is taking and comprehensive, and *much* might be said upon it. That our author has chosen equally as wide a range, cannot be questioned—that he is a searcher for truth, and no pseudo-lover of it—that he has collected physiological truths which even in their present connexion will repay reading, we venture to affirm, while at the same time we cordially re-affirm his statements that—

"The organized body, and some of the characteristic features of the mind have been treated of. Concerning the Soul, there is great indefiniteness in the idea of its precise characteristics. Consequently a lengthy attempt at an exposition would only add to the mystery. As soon as what can be known, with reasonableness or certainty, is stated, on any obscure topic, it is then becoming to cease, for farther remark cannot increase the light; therefore if it do any thing, it must mystify, what is actually known."

Two pages and a half of the pamphlet, judiciously, "concern the Soul," though remotely, and the author adds but little therefore to that perplexing and perplexed mystery.

W. T.

Case of Poisoning by the Extract of Belladonna.—The following case of poisoning by Belladonna, occurred at Black Rock on the 15th instant:—Charles Stevens, boarding at Tilden's Tavern, procured from an apothecary of this city, what purported to be a quarter of a pound of Dandelion, on a prescription given by Dr. L. P. Dayton, of Black Rock. On his return the medicine was prepared by adding to it about a pint and a half of water, and some loaf sugar. Of this the patient took, as nearly as could be ascertained, between two and three ounces, making from 120 to 180 grains of the extract. He shortly complained of vertigo, impaired vision, etc., and Dr Dayton was called to visit him. When Dr. D. first saw him, he was able to give, what appeared at the time a coherent account of the circum-

stances connected with procuring the medicine, but the account was incorrect, according to his subsequent statement. Dr. D. finding the pupils dilated, in connection with the other symptoms, inferred that the medicine was Belladonna, and prescribed, at once, an emetic of Ipecuenanha, and the sulphate of zinc, which operated satisfactorily. The surface and extremities being cold, sinapisms were ordered. He shortly lapsed into a semi-lethargic state. Dr. White and Dr. Flint saw him, by request of Dr. Dayton, about five hours after the medicine had been taken. He then lay apparently in tranquil sleep, without stertor, and respiration quite natural. Pulse 86, and otherwise normal. Countenance presented a bloated appearance, and the expression was abolished, as in profound intoxication. On raising the eye lids the pupils were largely dilated, a ring of iris being alone visible. When shaken, and his name loudly pronounced, he opened his eyes with a wild, staring expression. He replied to questions incoherently, frequently in a ludicrous manner. Occasionally he extended his hand as if feeling for something. Vision was manifestly nearly, if not quite absent. On directing him to drink some water, great difficulty of deglutition was apparent, and the effort excited some retching. The act of swallowing was frequently repeated while lying in a somnolent state. The tongue was furred, and on examination, the throat presented a reddened aspect, the tonsils being somewhat swelled. We remained with the patient a couple of hours, at the end of which time he could be roused with greater facility, the other symptoms remaining the same. Dr. D. had administered castor oil after the emetic, and before our arrival. During our stay, carbonate of ammonia in solution was given frequently, and continued through the night. He progressively improved after our departure, and by morning he had recovered his intelligence, and the other symptoms had mostly disappeared. Mr. Tilden, the keeper of the tavern, while the medicine was preparing, tasted of it repeatedly, and remarked at the time, that the taste was unlike the extract of dandelion which had been before prescribed in his family. He also was affected with giddiness, and staggered in walking as if intoxicated. His pupils, at the time of our visit, were considerably dilated, and his vision imperfect.

On examination of the medicine, it was found to differ in its sensible properties from Taraxacum, and resembled Belladonna; and on applying it around one of the eyes of a young man who was present, the pupil soon became largely dilated.

The pot containing the extract, had upon it the following label:—

EXTRACT OF
DANDELION
Leontodon Taraxacum.

D. J. H.

Prepared in the United Society, at Mt. Lebanon, N. Y. Put up in jars to suit purchasers, and sold, wholesale and retail, by BROTHERS HIBBARD, general agents for the Shakers. 96 John Street, New York.

Another pot, with the same label, from the same invoice of 25 or 30 pots, was examined, and appeared to be also Belladonna. How much of it is abroad it is impossible to say, but the above suggests the importance of caution in purchasing or using extracts thus labelled, without careful examination.

This accident may serve to illustrate the necessity for subjecting domestic, as well as imported remedies, to official inspection, and compelling druggists and apothecaries to sell only those medicines which have undergone proper examination. The public, by and by, will perceive the importance of such a measure for their own safety.*

Portrait of Dr. Josiah Trowbridge.—At a recent meeting of the Buffalo Medical Association, a committee were appointed to wait on Dr. Trowbridge, of this city, and solicit him to sit for his portrait, to be preserved by the Association, of which Dr. T. was the first president. We learn that in accordance with the wishes of the Association, a portrait has been executed by Mr. Wilgus, a native of Buffalo, who is deservedly eminent as an artist. Dr. Trowbridge is, we believe, the oldest practitioner in the city, a fact, however, which does not here, as it would in older cities, imply advanced years. We do but echo an universal sentiment, in expressing the fervent hope that a long period is yet to be added to his career of honor and usefulness.

Extension of Lecture Terms in Medical Colleges.—We perceive by our exchanges, and by circulars, that several colleges have extended the term of lectures. The Jefferson College, of Philadelphia, which was supposed to regard unfavorably the project of extension, announces that the next course will continue nearly twenty weeks. The Georgia Medical College has extended to five months, and so has the Louisville College. The Medical Department St. Louis University has added two weeks. We believe the list to be larger, but others do not at the moment occur to us. We doubt not the improvement will soon be generally adopted.

* Dr. Dayton has informed us, since this article was written, that the iris of the patient is still dilated, (18th) and that he appears listless, and absent-minded—but is daily improving.

Renunciation of the vending of Quack Nostrums by an apothecary at Buffalo.—Some months ago we published a communication addressed by an apothecary at St. Louis, Missouri, to the editor of one of the Medical Journals of that city, declaring his intentions to renounce, from principle, the sale of quack nostrums. By reference to the advertising sheet of this number of our Journal, it will be perceived that a similar course has been adopted by an apothecary of this city, Mr. H. O. Hayes. We hope the number of such instances will soon multiply, and ultimately the course be generally adopted by respectable apothecaries. We conceive that the plan which Mr. Hayes has resolved upon, constitutes a claim upon the profession which they are bound to regard, next to the paramount consideration that pure medicines will be dispensed with accuracy and fidelity.

Hornet's Nest.—Dr. T. T. Lockwood, of this city, at a late meeting of the Buffalo Medical Association, stated, that, when practising in the country, he had frequently prescribed *hornet's nest*, as an antispasmodic, and that particularly in whooping cough, he had found it to exert more influence in controlling the paroxysms and shortening the duration of the affection, than any other remedy he had ever tried. We suggest the employment of this article, especially to our brethren in the country, where the article can be readily procured, in order that its therapeutical value may be more fully tested. Will some of our classical friends invent a classical name by which to distinguish it, in season for its formal induction into the *Materia Medica*?

The next number of this Journal will contain a report on Cholera, by Prof. C. B. Coventry; and the number for September an article by Prof. C. A. Lee.

Prof. T. Romeyn Beck.—From a paragraph in the Albany Evening Journal, we learn that Prof. Beck has resigned his connection with the Albany Academy, and designs to devote his attention to a speedy revision of his work on the "*Elements of Medical Jurisprudence*," the last edition of which (the seventh) has been for two years out of print.

Inspection of Imported Drugs.—The bill providing for the inspection of imported drugs has passed the Senate, and is now a law. We trust it will be faithfully executed.

Barrett's Electro-Galvanometer.—We have examined an Electro galvanic machine, for medical purposes, constructed under the direction of Dr. C. B. Barrett, of New York, which appears to us to possess some useful improvements. It resembles, in essential points, other machines similar in kind, but is more neatly made than any we have before met with. An armature for giving shocks, is attached to the machine. Dr. B. has added a metallic belt, by means of which shocks are transmitted directly through the abdomen, which are said to be useful in some cases of amenorrhœa, and constipation; also a pair of slippers, with metallic soles, in order that the circuit through the lower extremities may be more fully secured. We are informed by the agent that a few of the machines are left for sale at Mathews' medicine store. The price, without the appendages last mentioned, is \$12 00. With the two appendages, \$19 00.

Singular Cause of Death!—The municipal regulations of the city of New York, require that the physician attending every case of disease, which proves fatal, shall deliver, in writing, a statement of the cause of death, for registration. The following has been handed us, by a friend, who states that it is a literal transcript of the cause of the death of a patient, as registered, in the language of the medical attendant:—

"This woman was died, because she did die, and she was die of vickness, and she could not live.

DR. VANDERHIDEN.

Collodion Controversy.—The controversy between two medical students of Boston, as to the merit of priority in having accidentally dropped a little ethereal solution of gun cotton on the finger, and discovered it to be an adhesive medium, bids fair to rival the gas war. Our friend the Editor of the Boston Journal, has placed his veto on any farther discussion of the subject in his pages. If we might presume to advise, it would be that the young gentlemen direct their enquiries to ascertain the extent to which the article is really useful. It may be that victory is not worth the powder. The discussion, if intended as a satire upon that which preceded it, would be excellent. Ether applied upon the surface, as well as respired, seems to have a peculiar effect in confusing the memory and blunting the judgment.

Delegates from Buffalo to the American Medical Association.—We omitted heretofore to mention the names of the delegates from this city who attended the late meeting of the American Medical Association. Buffalo was represented by three delegates. Dr. Bryant Burwell, attended

as delegate from the Erie County Medical Society. He was also one of the delegates appointed by the State Society. Dr. Walter Cary, was the delegate for the Buffalo Medical Association; and Dr. F. H. Hamilton from the Medical College. We hope soon to receive the printed proceedings and reports.

Patenting Secret Remedies; per centage on Prescriptions, etc.—We are glad to find in the columns of our esteemed contemporary, the Charleston (S. C.) Medical Journal, the following paragraph alluding to subjects which have been discussed, from time to time, in this Journal. The proceedings of the Philadelphia College of Pharmacy have not been received by us.

The Philadelphia College of Pharmacy have led the way in adopting a code of ethics, discouraging the patenting of secret remedies, and the sale of such by their members. The practice of allowing physicians a commission or per centage on their prescriptions, and of recommending one physician over other reputable practitioners, they also deem reprehensible, as well as the habit of apothecaries prescribing for patients.

There are also many other excellent recommendations, which we are glad to see. This code, coming from so highly respectable a source, and which we deem to be altogether excellent, will, it is to be hoped, be followed by all respectable apothecaries of the Union.

A new Competitor with Homœopathy. Isopathy.—A new German humbug has lately appeared upon the tapis, which bids fair to make a strong appeal to the affections of those who are ever greedy for medical delusions. The following account of the would-be-rival of Homœopathy, is taken from the London Medical Gazette:—

"A new medical doctrine has appeared on the horizon, and it is Germany again, *Alma parens rerum*, which enriches the world with this benefit. Homœopathy, magnetism, and phrenology, salute their new sister under the harmonious name of Isopathy. Dr. Hermann is the prophet of this doctrine, which is grounded on the following principle:—Every diseased organ has its remedy in the same organ; thus if you have disease of liver, eat liver; if a headache, eat brain; if you suffer in the bladder or kidneys, nourish yourself on bladder and kidneys; if the testicles be disordered eat testicles. As the organs may not appear very tempting to certain squeamish persons, M. Hermann has made tinctures of them, which his patients take in spoonfuls, under the scientific names of *Stomachine*, *Cystine*, *Testiculina*, *Umbria*, &c. The work published at Augsburg, contains fifty cases of radical cures. Go! young doctrine, increase and prosper—thou wilt doubtless be called to high destinies!"

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ORIGINAL COMMUNICATIONS.

ART. I.—*Report of Trial for Malpractice. WILLIAM TINS, vs. JAMES P. WHITE.* Supreme Court: Erie County Circuit, June 26th, 1848—Mr. Justice JAMES G. HORT, presiding. *E. Cook*, for plaintiff; *J. G. Masten, S. G. Haven, and James Sheldon*, for defence.

[The following condensed report is made from minutes of defendant's counsel.]

Mr. Cook—to the Jury. This is a special action on the case, brought by the plaintiff against Dr. White. The gist of the action is, that defendant, by treatment of right thigh bone, which was broken in the fall of 1843, acted so negligently and unskillfully, that, by means thereof, the thigh became deformed. The cause has been twice tried;—once in 1844, and in June 1845, and the Juries did not agree upon a verdict.

The facts are these: In December, 1843, plaintiff was engaged on a building, and fell and fractured the bone of the thigh at about the middle section, not exactly transeverse, perhaps, but slightly oblique. A surgeon was sent for. Dr. White examined the limb, and declared it to be an ordinary, simple, transverse fracture. He put it in a fracture-box, then journeyed East, and was absent for some days. We say it was not attended to as it should have been, and we claim it was not properly reduced; i. e. the bones were not properly put in apposition.

Plaintiff will show that when the limb came out of the fracture-box, it was not straight; and you will see that his limb is curved, and there is also a protuberance. We ask you to find that this happened through the carelessness of defendant.

A fracture is a simple thing to cure. It will heal itself; but during the healing process, great care and attention is required to prevent the parts from *lapping* while the limb is in the box. There are no arbitrary rules upon the subject. It must be left to the discretion and good judgement of the Surgeon to treat this as he may think proper. We shall show you that the limb was not properly dressed; the proper fracture-box was not used; the proper splints were not put on; and we claim a verdict for the wrong acts of the defendant, if you shall find it to be his fault.

! SAMUEL HILLIARD was then sworn for the plaintiff:—Knows the parties to the suit, married the sister of the plaintiff. The plaintiff lived in the fall and winter of 1843 on Main st. about a mile from the Eastern R. R. Depot. At the shingling of this depot, on the 2d day of December, 1843, the plaintiff slipped from the roof and had his thigh broken. The break was across there, (witness describes about middle of thigh bone); I told him it was a good break, as I discovered it was very near across and a straight break. I accompanied the men who carried him, as far as Main and Swan sts., and then I went on. Before starting we inquired who was the best surgeon. Some said Dr. White, and some said others. Near Swan st. I met plaintiff's father, who started from depot ahead. He had been after Dr. White, and said he was not at home, and was then going after Dr. Sprague. To prepare the way, I went on to get his wife, who was a sickly woman, away, and to get my wife there.

About the time plaintiff arrived, Drs. White and Sprague both arrived; I think Dr. S. was first. Dr. W. took charge of the patient, made examination of leg, and said, I believe the terms were,—it is a simple fracture, Plaintiff was now taken into the house and laid into bed, and they prepared to dress the limb. Dr. W. turned to Dr. S. and said, I think, he should use Sir Astley Cooper's inclined plane, asking whether it was the best one or not, or whether he used that one. Dr. S. answered, in some cases he used one kind, and in some another. Some conversation ensued as to who should have the patient, and I believe Dr. W. claimed the precedence, as he was first called. I returned to my work, and on my return at evening, the plaintiff was lying with his leg in a fracture-box, wanting the foot-board. The knee was slightly raised; he was laying upon his back. I made a shield of hoops to uphold the bed-clothes from the limb, and remained there all night, I think; was generally there after this during the evenings, and several times during the day, or in the morning, as I lived near by; and I believe I sat up with him the first, second and third nights after the injury. After that, his brother James Tims and Mr. George Parker sat up with him

nights. There may have been an evening I was not there, up to the time the limb came out of the fracture-box. Not to my actual knowledge was the position of the leg in the box changed in all this time, save once when Dr. White took it out. I had seen the limb the night before in the box, at Noon, I saw it out. In the evening, probably eight o'clock, I gave the limb an examination. There was a very great curve in the thigh bone, the flesh appeared shrivelled, and a large lump on the outside. The clothes were off and I rubbed it with my right hand, for he complained of pain in his knee and limb. I told my wife, when I went home, the limb was crooked. I saw him again that evening. Mr. Parker, Mr. Tims' father, and Brother James, and I think Mr. Haddock, were present, but am not certain. They all examined it, but I don't think the subject of the crookedness of the limb was mentioned aloud while I was there. It was about a Sunday, a fortnight, before I saw it again. I had been sick and confined to my bed, and he came to my house on crutches. It then presented the same appearance. I next saw it on Tuesday following at his house. Dr. White, Mrs. Tims and Sarah Mayo were present. Dr. White said it was a bad job; that it had been curved by muscular contraction or something of that kind. At this time Dr. W. fitted a splint on the outside and bandaged it, saying it would have a tendency to strengthen it and prevent its going any farther. I remarked the limb was crooked, when it came out of the box. He said that was a mistake, I was mistaken, or something to that effect.

I was not present when it was taken out of the box—I saw it in the box one day and the next it was out. I think it was Wednesday that it was in and on Thursday it was out. On Friday, or day after, I made effort to get the patient up; I moved him round to the side of the bed, when he complained the pain was so great that I let him rest; one leg was over the bed, but not so as to descend any, the broken leg was on the outside. The limb was naked, dark colored, skin not broken.

JOHN TIMS, father of plaintiff, sworn:—testified substantially as did Hilliard, and examined the leg on the second night (Friday) after it came from the box, for the first time and saw "a pretty good difference" between it and the other. I looked at it and satisfied myself it was crooked—no one said to me it was crooked before Friday night—his complaint of pain was general but never so severe as to my knowledge require sending for the doctor. I asked him how he was on first Friday night after the box was taken off, and learned he was middling well. His well leg is a straight leg, but a little hollow. Three or four days after Friday the pain came on and was very great, and continued two, three or four days. I never told

Almson Webster that the leg came out of the box straight. I know Gilbert Hoyt. I never told Hoyt after leg was taken out that William had been using it too much, and that he had a pull back. The box did not come up so far as to protect the whole length of the thigh bone underneath—there were no splints on the top of the leg, inside splints merely.

GEORGE PARKER, sworn:—My sister is wife of plaintiff—resided in upper part of same house—did not see the limb set, but saw him same evening; sat up with him part of one or two first nights after—was present and examined limb first night after limb was removed from the fracture-box—rubbed it with liniment. I looked at it to see if it was crooked, but cannot say whether it was that night or next night. Old Mr. Tins remarked that he thought it was crooked this second night, I looked at it then and I thought it was. I have never heard him complain a great deal of pain until after leg was taken out of box. The outside splint, while leg was in the box, did not set close at the upper end, but projected so that I could get my fingers beneath—[otherwise, the dressing was such as other witnesses described.]

ELIZABETH HILLIARD, sister of plaintiff—was present at the dressing about ten days after the injury. Doctor Wilcox and Charles Deer assisted Dr. White. Was not present at the final removal from the box, but in course of same day, (Thursday) went over and saw it was out. It had a shrivelled appearance and was swelled on the out side—I did not notice whether it was crooked. The next day I rubbed it, it did not look straight; my husband had before told me it was crooked. On Saturday Dr. White was present and my brother was in great pain—the doctor did not prescribe anything, or look at the limb, but said it would be off in a day or so. Nothing was said about my brother's trying to get up, to Dr. White.

JOSEPH G. HADDOCK sworn: saw him occasionally when confined with broken limb—saw him the next Sabbath after the limb came out of the box, about the 15 or 17th January, and noticed the limb was crooked; he was on the bed; he had his pantaloons on I believe; did not feel the thigh.

JAMES TINS, brother of plaintiff, testified to the points at issue, much as witness first called.

SARAH TINS, (formerly Sarah Maloy) sworn:—Wife of John Tins, Jr. Lived in family of William when his leg was broken and under treatment; was in the house, and soon in the room, after the box was finally removed. On next day (Friday) was sent for Dr. White, on account of plaintiff's suffering pain—did not see Dr. W.—but his student, Dr. Newman—Dr. White did not call that day. The first I remember of seeing Dr. W. there, after the limb was out, was on Sunday, eight or ten days after—he came

in walking up to Tims, laid his hand on his thigh and said: why Tims you have got a crooked leg—that was all I heard. On first Saturday evening, six o'clock, after the limb was taken from box, I came home and found plaintiff sitting up by the bed in a chair; don't know who helped him up; Mrs. Tims was sickly and unable to lift him up, and the children were not large enough; I don't know how long he set up; I stayed long enough to have my supper in the room; can't say I saw him up on Sunday; I think Mr. Haddock came in on Sunday, and said, he must not set up.

Dr. JOSIAH TROWBRIDGE sworn: Is a practicing physician; was formerly a practicing surgeon, for about 25 years; I relinquished that practice because the legislature have enacted, that if any person is convicted of being engaged in acquiring a knowledge of Anatomy and Surgery by dissection, (and it is the only way in which a perfect knowledge can be acquired) he shall be sent to the State Prison. Our Courts and Juries have decided that if any Surgeon does not possess this information, (or otherwise, if he commits an error) he shall be mulcted with ruinous damages. I resolved therefore not to serve the public on such conditions.*

In the treatment of a transverse fracture of the middle section of a thigh-bone, I should think it sufficient to put it upon a double inclined plane, after putting the bones in apposition, and applying simple short splints, these to be secured by bandage or tapes; if much inflammation or swelling, it is common to apply whiskey or water. Having called upon the patient once or twice previously, to see if comfortable and bones are in place, on the 8th or 10th—6th to 10th day, if a man age 28 and of good habits, from the time of reduction of fracture, I should make the second dressing. The difference between a transverse and oblique fracture could be ascertained by a surgeon before, or certainly at time of making reduction. If at time of making second dressing, I found all in good condition, I should not make any change, but continue the splints, &c. The object of the whole is to keep the bones in apposition. There is not ordinarily

* In answer to the question direct of counsel, these remarks elicited from the oldest surgeon called to the stand, and one who is noted for the firmness with which he has ever upheld the true dignity of his profession, have their significance, and lose naught of their pertinency when to them we add,—in this city there are but few surgeons of years, or of reputation in the profession, who have not been latterly crowned with the accompanying honors of a public prosecution for mal-practice! Dr. T., by his timely and judicious course in laying down the scalpel, although a shining mark, we believe thus far has escaped the attempts of these modern, prolific and hydra-headed *Chirurgophagi*. If such trials result elsewhere as they have here, how fast soever they may increase in numbers, these feeders-on-surgeons must soon become attenuated to mere shadows by want of success in fastening upon their prey.

any union of the bones up to the 8th or 10th day. About that time the callus begins to form, and now our object is to see that all is placed right for a permanent dressing. I have seen several fractures of the thigh, and treated them. When the leg is put into the fracture box, the box should come far enough up to protect the knee, keep the knee at the angle; you cannot get the box higher than the ischdelalum, the object is to make extension at the knee, the splints guard against displacement and the box makes the extension. I used to put short splints on laterally, and as a matter of precaution, sometimes one on the top of the thigh. The average time for keeping the limb in the fracture box, is about six weeks, where there has been no untoward circumstances, though in a patient like Mr. Tims I used to keep it on about seven weeks, but that is not the average; if a splint should protude so that I could get my hand under it, I should look to the cause and rectify it. Each case must depend upon its peculiar circumstances in determining about the time of removing the dressing. I should remove the bandages and short splints and examine with gentle flexion, to see if bony union had taken place, in order to decide upon removing the box. Here the judgment of the Surgeon is very important. I would not remove the box until I thought the patient might moderately move his leg in bed. My impression is, I would keep the short splints on a short time after the box was removed as a matter of precaution—though not important. It is proper to remove the splints as soon as possible, to let the blood circulate, &c. (Witness examines plaintiff's leg.) I think the bones are not perfectly in apposition and that causes the curve. I should think the bones might assume their present condition after their coming out of box, in apposition, and after a sufficient ossification to authorize me to remove the limb from box, in consequence of some violence. Spasm of the muscles,—any violence, sudden hanging of the leg over the bed, or chair, which was too high to rest the foot upon the floor would do it. If the bones come out of box in their present condition, I should think they either lapped, or were thrown out of line. I should hardly think they were out of line enough to produce a shortening of one inch. When bony union is sufficient to justify removal of box, the bones cannot slide by, or lap, it would be the same as breaking the leg and cause about as much pain as the original fracture, though if broken a week after, I should not apprehend any particular danger. The bony union is not strong enough to bear the weight of a man without crutches, we therefore put them on crutches.

I cannot say whether plaintiff's leg is a transverse or oblique fracture, from my examination I should say it is more than half an inch shorter.

I did not find it so short as I expected; his other leg is more curved than thighs in men generally are. I don't think Tims' leg is a good leg; but it is a medium cure. I should expect a better leg if the Surgeon and patient both did their duty, and all was favorable.

[A series of questions written by defendant were put: to these are subjoined the answers of this witness.]

Does a sudden snap or grating noise, in transverse or slightly oblique fractures of the thigh bone, accompanied by disappearance of the deformity, afford strong evidence that the fracture is reduced? *Ans.*—It does. I should have no doubt about it in such a case.

If a limb had been well dressed and fitted in this box, would the ends of the bones have been likely to become displaced without the foot-board being applied during the succeeding six hours? *Ans.*—I should think not.

Would there have been any danger of displacement, in carefully applying the foot-board at that time? *Ans.*—I should think not.

If the bones had been displaced, would it have aggravated the sufferings of the patient during the succeeding ten or twelve days? *Ans.*—I should think it would for some few days.

If any displacement has taken place, can it be rectified at the dressing on the tenth or twelfth days without detriment to the fracture? *Ans.*—It can.

If in a simple fracture, a healthy man, 28 years of age, you had carefully adjusted the ends of the bones, and the bandages, on the tenth or twelfth day, and no untoward symptoms should supervene, at what time would you expect to be able to remove the apparatus? *Ans.*—In six weeks, provided I had confidence in the patient.

If under these circumstances you were to remove all the splints on the 47th day of the fracture, and everything appeared favorable, would you consider it safe and prudent to leave them off, directing the patient to remain in bed two or three weeks, and gently flex and extend the limb? *Ans.*—I should provided the patient followed my directions.

If under the above mentioned circumstances, you were to call on the following day, or 48th after the fracture, and find on careful examination, everything favorable, would you consider it judicious and prudent to dismiss the patient with proper directions for taking care of himself? *Ans.*—I should.

Suppose on the same evening he were to send for you, and on your calling the following morning he should say, "Doctor, I had considerable pain last night but am easier this morning, and I have sent for you to know if

it is common for such pains to come on after the box is off." Would you think there was anything unusual, likely to be present? *Ans.*—That would depend entirely upon circumstances. If a slight pain, I should think there was nothing out of the way; but if very severe, it would be likely to attract my attention.

Would you think it necessary under these circumstances to do more than prescribe quietude, gentle flexion of the knee in bed, and friction with a liniment? *Ans.*—The answer would be the same as before.

Do you believe the callus flexible at a time when it is safe to dismiss the patient? *Ans.*—I should think it was if sufficient force was applied.

Do you believe that spasmodic action of the muscles *could* bend the callous from the 50 to the 60th day? *Ans.*—I believe they could do it.

Would too early use of the limb, after removal of bandages, be likely to excite irregular or spasmodic action of the muscles? *Ans.*—I cannot say that it would have that effect. I have never seen any effect of the sort, that I know of.

If called to a patient with a curvature in a callus of the thigh bone, at how late a date would you think it prudent to undertake to straighten it by means of apparatus? *Ans.*—It would depend upon circumstances. In a patient of the age of 28, it might be, I should think, safe to attempt it as late as the tenth or twelfth week.

If the present deformity in Tims' leg had existed at the time it was in splint, what would have been the result of the firm application of this splint over the prominence for six weeks? *Ans.*—Either one or both ends would have been raised from the thigh, and it would have produced irritation at least; and, if proper force had been applied, ulceration probably.

What is your opinion of the present condition of Tims' leg? *Ans.*—It is not near as bad a leg as I have seen, from the same kind of fracture, nor as good. It is about a medium cure of leg.

Does more or less deformity usually follow fracture of the thigh bone? *Ans.*—It does even in the best cases.

Does the shortening of the limb one inch necessarily imply unskillful Surgery? *Ans.*—It does not necessarily, for it may arise from causes beyond his control.

I have never read Chelius on Surgery; the author I have heard well spoken of, but the publisher and commentator, South, I have not heard so well spoken of.

DR. CHARLES WINN, sworn: I should make my dressing at time of reduction a permanent one, and afterwards only give care and attention;

using four splints and a roller and many tailed bandage if fracture transverse, without extension or counter extension; if oblique I would add the double crutch splint or apparatus of Dr. Gibson. My own experience with it has satisfied me that it is better than some other apparatus that I have used.

After limb thus dressed, I should deem it necessary to visit in the course of a few hours, to learn of comfort of patient, and stability of bandages, &c. For first two or three days I should call twice a day; if doing well I should call twice a day—as the bed may sink, the bandages loosen, and other matters of about as much importance as the setting of the bone would require attention. While the callus was forming I would call once a day, and keep so calling, until the callus was judged so formed as not to need such frequent calls; after this perhaps twice a week. I should make examination by removal of dressings as early as first 24 hours, if all was not right, and perhaps continue to examine it till I was satisfied the callus was formed.

As to final removal of splints, I should be guided by authority, &c., say six weeks bound pretty firmly, and afterwards more loosely, or apply some light ones, as felt or pasteboard, to protect the limb in its weak state. I should judge by moving the limb, and the pain, if any, &c., and an exercise of my own judgment, whether the callus was sufficiently formed to remove apparatus and splints.

In the latter calls, I would examine the limb of the patient; I would untie the bandages and take off the splints generally, and determine if every thing was right. It takes but very little time to do it.

[In general, the opinion of Dr. Trowbridge, as to present condition of bone, and cases supposed hypothetically, or otherwise, were coincided in.]

Of Chelius on Surgery, I can only speak from its reputation—the best from any German author. By eminent reviewers it is said to be elaborate, and the commentaries of South, as being very able; his reputation is that of an able surgeon, and his text of as high authority as Chelius himself. If they clash, would prefer South; am not particularly acquainted with either author.

The box present, I think is Sir A. Cooper's. It is in very general use among surgeons. I think Gibson's apparatus better, in some cases, certainly; know of no surgeon in town who practices my method. Where the apparatus was taken off after 48 days, the patient ought not to get up, even if callus is hard, by his own exertion. It would be very bad on the part of the patient. I have treated three fractured thigh bones myself, and seen several.

I know Dr. Wilcox. He is a good physician and surgeon; don't know as I knew him in 1843, and how good he might be then. I know Mr. Lane, who read with Drs. Loomis and Sprague; he was a diligent student and a worthy young man.

Dr. B. BURWELL testifies:—I am a practicing physician in this city; practice surgery, not enough now to be called a practicing surgeon; never have treated fracture of thigh-bone alone, by myself. Have examined plaintiff's thigh before this suit at instance of plaintiff's attorney and defendant, at my office. In supposed cases, and judged actual case, witness differs not essentially from Dr. Trowbridge; he approves of the fracture box; would modify if need there be; six weeks is the usual time for confinement in apparatus, man of 28 years, and good health; as a precaution, might put on lighter dressings after. On inspection at my office, my impression at the time was that the limb was crooked and shortened one-half to three-fourths of an inch; can't say whether from curve or overlapping of bones. (Testimony as to D. White's skill &c. overruled and excepted to by plaintiff.)

Latta's Surgery is a work of authority and standing, not new; Miller's Principles is well spoken of and recent. The American Medical Journal containing Norris' Treatise on Fractures, is good, and posts up to the present day. Statistics of Massachusetts General Hospital, by Norris, also good. Ferguson's practice of Surgery, good; and Samuel Cooper's Surgery is a work of authority. The profession acquire their learning from these books.

I have seen better limbs than Tims', and worse, for strength and usefulness it is about a medium cure. It is a difficult bone to heal, to cure and have it straight.

Know Dr. Parker, of New York; have for past twelve years; has always stood high as a man of authority in surgical matters. Is a Professor and teacher of Surgery in College of Physicians and Surgeons, and has been ever since my acquaintance with him.

Dr. JOSIAH BARNES, sworn: Has examined plaintiff's leg, I came to the conclusion that the curve was sufficient to account for shortening; the cure is about a medium one; has been in the habit of seeing Desault's, Gibson & Hagedorn's apparatus used; saw Cooper's box used only once, and then it was unsuccessful; makes the first, usually, the permanent dressing; calls once in every two or three days. Hypothetical cases endorsed as by Dr. Trowbridge, generally. Has never treated a fracture of thigh bone in and of himself; knows Professor DeLamater, of Cleveland, by reputation; he is an old Professor; he was present at last trial, and stands high as a

Professor. Dr. Wilcox he knows; he has had a good deal of practice and is esteemed a good Surgeon. At the time he was licensed he was so considered.

Dr. NOAH H. WARNER, testifies: He is in practice of medicine—never has had a great practice in Surgery; should use here a straight splint; make a second dressing; calls for first two or three days, two or three times each day, afterwards, once in a day or two; makes second dressing from third to seventh day, is governed by the amount of inflammation; uses 4 splints and bandage 18 tailed, and roller, in place of strings; if oblique fracture would put on long splints. Plaintiff's shortened limb, from examination, I judged to be from lapping of bones. Now, if I were to treat another case I would have the lower splint go under the tuber of the ischium. I differ from other physicians in some things as well as others, I practice homoeopathy.

[The plaintiff at this point has called all his witnesses save Dr. Sprague who is confined by sickness. As his testimony was deemed quite essential and was had at two former trials, we refer to minutes of first, and give in brief his peculiarities.]

Dr. A. S. SPRAGUE, sworn: Saw the limb of Times the day it was fractured, gave it a very slight examination, think it was slightly oblique. If properly dressed and secured, should have been straight now; I think that the bones were not directly in apposition. If limb was in proper position when it came out of the fracture-box, the callus must have been fractured again to put it in its present position. Any bending would break the callus. Almost all the large muscles of the thigh have a tendency to turn the thigh outward, eight-tenths of the power is outward. There is sometimes an evil in keeping the dressing on too long. Muscular action would be likely to break the callus not bend it; if the leg [callus] had been broken by spasmodic action of the muscles, he would not have walked on it a week afterwards. If the bones were properly adjusted there would be no bulge such as is on the plaintiff; I keep on the long splints eight or ten weeks, when I take off splints, I usually keep on some light splints some three or four weeks afterwards. I put them on to guard against spasmodic action, and sometimes to relieve the pain. If the patient, after leg is removed from the box, complained of pain, I should seek the cause and its removal. I have heard the testimony of the witnesses as to the pain of plaintiff. I should not think it prudent to let such a patient go without examination; I should be fearful that something was going wrong.

The strength of the muscles would be very much impaired by being kept fracture-box; it would be impossible to say whether the muscular action might fracture the callus after the leg was taken from the box. It might be broken: healthy bones are sometimes broken so; it would not bend much before breaking.

I use the double inclined plane fracture-box. The principal requisites are that the box may be extended or shortened—the machine here produced possesses these requisites.

If there was a splint bound on a protuberance, it would cause pain and soreness; bones not put in apposition would produce more pain than if in apposition.

[On comparing this testimony with second trial, it is proper to say, the witness adheres generally to his statements, but expresses a different opinion as to the properties of callus.] [*Here plaintiff rests.*]

J. G. MASTEN *in Defence*—States the law requires ordinary skill, with ordinary care and diligence, and if it shall be made to appear that defendant possesses this amount of skill, and exercised that amount of care and diligence, the jury are bound so to render verdict.

The patient has duties to perform as well as the surgeon, and if he shall have by his carelessness or neglect failed here, the surgeon is exonerated.

It is the duty of the surgeon to reduce fractures, that is to put the bones in apposition, and then resort to some mechanical means to keep the bones in their proper position. This may be done at any time within ten or twelve days; in this time, nature is doing nothing towards uniting the bones, but is making preparation for it. He then gave a lucid account of callus, its properties and mode of formation. In support of these positions, he reads from Latta on Surgery, Miller's Principles of Surgery, Norris, in 3d volume American Medical Journal, new series, also 1st and 4th; Samuel Cooper's Surgery, and Ferguson's Surgery.

Dr. JAMES M. NEWMAN sworn:—Read my profession with Dr. White, and have been in practice one year; attended three courses of lectures and graduated in Cleveland. Recollect Dr. White's attending plaintiff's broken leg, was first informed of the accident by plaintiff's father, who came to Dr. White's office for his aid. Dr. W. was not in; I sought and found him; told him of it, and he rode away. In a little while after Mr. Lane, (Dr. Sprague's student) came in and requested me to go up with the fracture-box to the plaintiff's house. I took it and went up. After the bandages were prepared, Dr. White proceeded to reduce the fracture.

One man held the foot and made gentle extension upon it. Dr. White rolled the limb, with rollers, from the ankle to the thigh. After the extension was made, he put a long splint on the outside of the thigh; this splint is like the one put on (witness points to a splint in court-room) and a shorter one on the inside—these were properly fastened by a roller around them.

Dr. White took hold of the thigh at the setting. I was standing at the side of the bed looking on; patient was on the bed; Mr. Lane was in the room. I heard a loud snap at the time the parts were adjusted proceeding from the seat of fracture.

After the splints and rollers were on, that apparatus, (apparatus in court) was put to the well leg and adjusted by its screws, so as to fit the well leg and get it to the right length, it was then placed on the fractured limb and fitted by filling cotton at such places as required to make it comfortable and level, and then strapped up with the buckle. It fitted when it was strapped, nicely to the leg. The patient was left in bed on his back, leg in box and knee bent. The foot board was not in at the time. The fracture was reduced in the morning. I did not examine the limb; had before seen fractures during my pupilage, from July to December; but had never seen a broken thigh or the fracture-box applied before. Dr. White left the patient before dinner, and left town for Geneva in the afternoon. At Dr. White's request, made through me, Dr. Wilcox, a practicing surgeon, and former student of Dr. White, visited the patient in the evening with me, a little after dark, and he put on the foot-board and fastened the foot by bandages. Dr. White was absent a few days and left Dr. Wilcox to take charge of Tims. I visited plaintiff next day with Dr. Wilcox; he was comfortable and nothing was done. I saw him again a day or two after; he made no particular complaint; heard of nothing wrong.

I saw him the next time when the apparatus was finally removed by Dr. White, the latter part of the week preceding the 23d of January, cannot remember the exact day. No one was present except Mrs. Tims. It was in the morning between 9 and 12. The splints all set snugly upon the thigh at the time, the whole length of it. Dr. White asked how long since the limb was broken. Mrs. Tims made a calculation; it was a little over six weeks. After unfastening the straps, I raised the limb and continued to hold it while the doctor removed the apparatus; the splints appeared to be fastened firmly. I laid the limb upon the bed. Dr. White placed the limbs together the heels and toes; after looking at the limb, the Dr. said it was straight, and told Mr. Tims as he was a mechanic to take sight across the limb and see if it was straight. Tims raised his shoulders and looked

at the leg and said it was straight. Mutual congratulations passed between them about the success of the cure. The Dr. told him he must keep in bed and not attempt to get up, and gently use the limb in bed, so as to acquire the use of it again slowly. I looked at the leg and compared it with the other; it appeared to me to be straight. I believe I felt of the callus at the time. I went for the purpose of seeing and learning.

The 22d of January was the next time I knew anything about it. Called at Tims' house with Dr. Wilcox to enquire where Hilliard, who was sick, lived. Dr. Wilcox asked plaintiff how he was getting along. He said he had had some little pain. He did not complain of having had any severe pain. His wife said he had been standing up that day. Dr. Wilcox told him he must not get up, that he must use his limb in bed. This was Monday evening, after dark, the Monday after the leg was taken from the box.

The next time I saw the leg was in Dr. White's office, where Tims came to see about the leg; he walked with a cane, the time I cannot fix upon. I had before heard of the leg's being crooked. Plaintiff and Dr. White went into the side office. Dr. White requested witness and Mr. Dayton, a student, to come in. Dr. W. requested me to get the splint that had been on the outside of plaintiff's leg. Plaintiff was standing on the floor with pantaloons slipped down. Dr. White requested me to place the splint on the thigh in the position it had been formerly; this I did, and plaintiff said it did not set then as before, before it sat flat on the thigh; it did not at this time in consequence of deformity. Conversation then ensued about it. Tims said his thigh was straight when the splint was taken off, spoke of his having severe pain, and of the crook coming on subsequent to his having the pain. He said the pains were in place described, (putting his hand on the inside of the thigh.)

Dr. White went away the 22d of January, and was gone a few days. I do not remember Sarah Maloy's coming to the office on Friday, and asking for Dr. White to come and see Tims; don't know whether Dr. W.'s absence included Friday or not. Mr. Lane is out west in some western state.

Dr. CHARLES WILCOX, sworn: (Plaintiff objects to his testimony, overruled and exception taken.) Is a Physician and Surgeon; recollects when plaintiff's leg was broken; had seen and treated fractured bones before I saw Tims' leg; some 12 or 15 cases. The first I knew of Tims' case was when Dr. Newman called on me in the evening, to go with him and apply the foot-board; this I did 2d December. Applying the roller I thus fastened the foot to the foot-board; with all the care I could. I saw

plaintiff the next day, 2d, 3d, 4th, 5th, and 7th days after. I made it my business to go on these occasions. He appeared to be very comfortable for a man in his situation. On the 7th day I opened the outside splints of the box, made an examination and applied cotton around it, to add to his comfort. Dr. White returned the 7th or 8th December and resumed the charge after that. I do not recollect promising the plaintiff that if defendant did not return on the 7th day I would take off the dressing, and re-dress it on account of the severe or any pain he had. I heard no unusual pains complained of; don't recollect of the patient's requesting me to examine the limb. I discovered no inflammation or anything unusual during the time I attended him.

In a few days after Dr. White requested me to assist in re-dressing the limb. I did so. We proceeded to remove the fracture-box and all the dressings on the bear skin. Mrs. Tims, Mr. Deer, and one or two ladies were present, one was Mrs. Hilliard, I believe, I am not positive. Mr. Deer came in for the purpose of assisting. The limb's appearance showed the effect of the bandaging. It was but little, if any, swollen. The leg was washed off with whiskey and water and laid upon the bed. In taking it out of box, Deer held the heel; I supported the thigh. No complaint of pain attracted my attention. At time of dressing it would not be unusual to complain of pain. The bones remained in apposition, perfectly, while I was around there; the leg appeared at time perfect and straight; I saw no deformity. Dr. White adjusted the bandages, fracture-box and splints; I held the thigh; all was done under my immediate eye. We then left.

I saw it again the 19th January. It was Friday; know from dates on my book. I understood it to be the day after it was taken from the box. Dr. White was with me. We had a conversation, as also Tims, about it. I recollect examining the leg as plaintiff lay in bed, the fracture-box was removed; Dr. White also examined it. My attention was called to the callus; we were conversing about the strength of the callus to support the limb, I felt of it, raised the limb by the heel, found the leg straight, did not test its strength any other way. The legs were examined as to length. I saw no difference after taking particular notice. This was a surgical examination to discover the length of the limb. Tims seemed to congratulate himself, he said it was a good job. The substance of the language was that he was well pleased with the result. We were there ten or fifteen minutes and had no other business except to see the leg. I did not hear it said, intimated from any source, or suspect it was crooked. I heard no complaints, he appeared to enjoy good health, inquired how long before he could

get up. Dr. White told him he could go out in two or three weeks. He directed a liniment to be had at his office to rub his limb, also directed him to flex and extend it and to remain in bed. I considered his limb in a condition then to be dismissed without the bandages, &c. The leg was not swollen; the skin was well under the circumstances; it showed the mark of the bandages.

I next saw the limb the Monday evening following, with Dr. Newman; I called to enquire my way to Hilliard's house. Plaintiff was in bed, I raised the clothes and passed my hand over the leg, and gave it a superficial examination. Did not notice any change save that muscles appeared to be getting more natural and circulation had begun. Heard no complaint of pain—had no intimation there was pain; did not suspect or have intimation from any one that it was crooked. Nothing further took place that night. Tims said he had been sitting by the stove that day; had been sitting up; I recollect I chided him for it.

I next saw the leg a week from that day, on Monday. The first Monday, 22d January, there was neither pantaloons or drawers on the leg. On the 29th January, Monday, I saw it with Dr. White. I had heard it was crooked, met the Dr. and told him of it; he took me into his sleigh and carried me up. The 28th I first heard it was crooked. During the week preceding the 29th I had been visiting Hilliard who was sick. On examining the leg on the 29th, we found it crooked. There was a conversation as to how it came so; plaintiff said on the Thursday before, the 28th, he had suffered great pain in his ham-strings and leg and the curve came on simultaneously. We examined the leg and proposed to straighten it. Tims inquired how much he would suffer from the pain we explained to him, and that was not raised as an objection. He asked how much shorter the limb would be. Dr. White suggested a high boot-heel would relieve it. I urged him to have the attempt made to re-adjust it. He refused. I think the opposition to having it done, was from both him and his wife. We explained all about it; It was the 29th January. The process of extension would not necessarily have fractured the callus. I think we laid no splint upon it. The conclusion was, that if the callus was bent by spasms or other cause it might be restored. I think it would have been injurious to have put a splint on the outside, one might have been put on the inside; on the 19th I saw nothing to prevent the limb from supporting itself, if the patient was kept in bed. I should not have allowed the patient to get up. Druitt's Surgery is good authority.

Dr. LEWIS P. DAYTON, sworn:—Practices at Black Rock, recollects plaintiff coming to Dr. White's office in March. Dr. Newman was present and Dr. White. Dr. N. got a splint, which they said was the one which had been on plaintiff's leg; the splint was like the one shown in court. Plaintiff said the splint fitted the leg at the time the box was removed, that some two or three days after the box was removed he had violent spasms and cramps in his thigh; indicated where, by putting his hand on the inside of the thigh, and that about that time he discovered a bunch on the outside of his thigh. There was something said about his getting out of bed, or turning his feet off the edge of the bed, or getting up. I recollect that Dr. White said you know that was contrary to directions. Tims assented. The conversation took place chiefly between Newman, Tims and myself Dr. W. having been called into another room to see a patient. I recollect plaintiff said that he sighted across the leg when it came out, and it was straight.

Dr. ROBERT L. LANE, *de bene esse*, Sept. 1845—read. Deposes:—He is a Physician and Surgeon, former pupil of Drs. Sprague and Loomis—knows the parties to this suit. Was present in the fall of 1843, when Dr. White reduced fracture of thigh for Wm. Tims: had been two years and nearly a half a student of medicine at this time; went to Tims's house with Dr. Sprague; paid particular attention to this operation because Dr. White, was the surgeon. Viewed the limb and its deformity; deformity was removed by the operation, and I knew the bones of the leg were put in apposition by the snapping noise made on their coming together, a noise as if the bones had come suddenly together; have witnessed the setting of legs before, but did not then hear a snapping noise. I was paying particular attention in plaintiff's case; stood close beside the bed. The leg was bare, and after the operation was performed, I observed that the limb had come to its natural shape; the unnatural bend or crook of the limb was removed; saw the limb well dressed and put into the fracture-box; witness here makes a statement of his going for the fracture-box and not obtaining its foot-board. From the circumstance that Dr. Sprague is an eminent surgeon, have had better opportunities than most students to acquire a knowledge of surgery.

ALANSON WEBSTER sworn: Knows the plaintiff and his father; at the time the leg was broken they were in my employ; had a conversation with the father after the leg was taken out of the box. He said the leg was as straight, or as good as the other, I can't tell which. He was at the Depot at the time of the conversation. He used to speak about
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the leg pretty much every morning when he came to work. He told me the day before, that the leg was to be taken out of the box, and the next morning we talked about it. At a subsequent time he told me either it was, or he was afraid it was crooked. Before the injury, plaintiff was a smart active man.

GILBERT HOYT sworn: testifies he knows the plaintiff and defendant. I saw the limb set; it was deformed before it was set, I saw it go together; heard the bones snap as they went together, and saw the deformity disappear; I stood at the foot of the bed; saw the plaintiff next Sunday, also about a fortnight after second dressing; he appeared to be comfortable, I heard no complaints. I know old Mr. Tims; the next morning after leg came out, he was inquired of at the Depot, how it was; he said the plaintiff had a good leg, and straight—nearly as good as the other; these were the words; the day of the week I cannot tell. Ten days after, I had another talk with old Mr. Tims, he said he was afraid the plaintiff had a bad leg. He said he was a very heavy man, and he was afraid he had used it a little too much.

HARRIET W. DOTT, *de bene esse*, June 26, 1844, read. Being duly sworn, says, she knows the parties in this suit. Some time last winter plaintiff broke his leg and defendant attended him as his physician; she lived the second door from plaintiff, was in his house to see him several times; once or twice while the leg was in the cradle; he said he was getting along pretty well, but complained of a good deal of pain; was there on a Thursday after the leg had been taken out of the cradle, in which it had been placed; inquired of plaintiff if it was straight; he replied, yes it was. Witness then asked him how he knew or how he could tell, to which plaintiff replied that it was easy for any one to tell it was straight, for it had all fallen away, and there was not much else of it but skin and bone. Plaintiff said the leg had been in the cradle seven weeks, his wife said it was six weeks and some days. The leg was taken out on Thursday morning; this conversation occurred on Thursday afternoon. No one was in the room but plaintiff, his wife and witness. About a week or ten days after, witness saw the plaintiff again, his leg was then crooked; he then said that he had had a great deal of pain in his leg, and had had violent spasms, thought it very singular, didn't know the cause, and that the spasms had occurred since witness last saw him.

Dr. HARRY W. BUSSEL sworn: Is a practicing physician and surgeon; the first I ever heard of the case, Dr. White and plaintiff came to my office; Dr. White said he wanted me to examine plaintiff's leg if I had leisure, he

had treated it sometime before, Tims was satisfied with the treatment, some of his friends were not. He wished me to examine it critically and give my opinion as to the propriety of the course that had been pursued with it. I heard Mr. Tims's story about the treatment while I was examining it. From what I then could learn of the treatment, I supposed there had been a judicious course pursued, and that when the leg was taken from the splint it was straight. Why I came to this conclusion was from what Tims told me. I remember asking him how he knew the leg was straight when it came from the splints; he raised his leg and said, I gunned it. I don't recollect of any thing being said of his getting up. I made up my mind from Tims's own story; there was no discrepancy in the parties statements. I don't recollect what time Tims said the pain came on after it was taken out of box; it was within a few days, perhaps a day or so, but I can't say. He said he was in great distress and sent for the doctor. If I had been sent for under such circumstances, I should have endeavored to discover the reason of the pain; I would probably have examined the limb and given some liniment or anodyne.

Dr. AUSTIN FLINT, sworn: knows the parties to this suit. Was called upon at his office for purposes, as testifies Dr. Bissel; the general statement of the case by the parties, as testified is substantially the same. Did not examine or see the limb with the clothes off. The parties did not disagree in making their statements. The plaintiff affirmed distinctly the limb was straight when it came out of the box; I asked him two or three times; nothing was said about the patient having been up. Plaintiff stated the curve came on a few days after box was removed; can't state the precise time, one, two or three days. To question previously put. If a man should get up—sit in a chair at this time, with help of a feeble woman, or alone, the risk and danger would be proximate and imminent, and it would be very injudicious; I should think it might be probably bent at that time, the callus not being very solid. If he got up, a knowledge of this would be of essential service to me in my subsequent treatment. If man of age and constitution of plaintiff, I should say in six weeks dressings might be removed without danger, if the patient continued to be in bed and practiced gently flexion of limb; think it important not to keep dressings on too long as they retard the circulation; debility of the muscles and stiffness of joints might ensue. Healthy formation of callus, &c., depends upon the health of the adjacent parts. I know that callus is flexible, in some cases, after the dressing is off, (6 or 7 weeks); I have seen such a case. I should consider plaintiff's leg about a medium cure; the fracture of the thigh

bone is one of the most difficult bones to treat, perhaps the most so. I don't think there is shortness enough for an over-lapping.

The inclined plane and straight splint are both used, and by eminent Surgeons. I use Cooper's double inclined plane. French Surgeons sometimes dress without any short splints. One uses no splints at all and he is an eminent Surgeon; they use extension but no splints.

Dr. HORACE A. ACKLEY, *de bene esse*, Oct. 15th, 1844. Has resided in Cleveland for past 2 years; is Prof of Surgery in Medical College there; for 8 years previous was a Professor in Willoughby University, Ohio; am at present entirely engaged in practice of Surgery; have not been for many years without cases of fracture constantly under treatment.

In answer to the question what is the proper treatment of a simple fracture of the thigh-bone in a healthy subject:—In the first place I would reduce the fracture; if there were displacement, then place upon the limb some easy and convenient apparatus to keep the fracture reduced or the bones in apposition. I would then see the patient occasionally until I was convinced that union had taken place to a sufficient extent to maintain the fractured extremities in apposition. I would then remove the dressings, use friction, various stimulating liniments, and have the patient gradually accustom the limb to motion.

I consider Sir Astley Cooper's fracture box, a very useful apparatus for fractures, oblique or transverse, of the thigh-bone, and with the splints and their proper application, all that is necessary in the treatment.

I should undress the limb, in from five to ten days, depending upon circumstances; sometimes not at all. If everything now is found favorable, I can see no motives for another dressing at all. I should call from time to time, up to 8th day to examine the limb; if the fracture was complicated with contusion of the soft parts, and swelling, or subsequent inflammation was to be apprehended, spasms, or some general febrile excitement, with a great variety of other untoward symptoms; otherwise, I should pay but little attention, if any, for the first eight days. If no untoward symptoms should arise I should not re-dress, but remove the apparatus between the fourth and sixth weeks after the reduction, and if union had not taken place, should re-apply them, and keep them applied until it had taken place. In answer, generally, I should say from fourth to sixth weeks under ordinary circumstances it is usually safe to entirely remove the apparatus and splints. The patient generally begins to use the limb before bony union has taken place, the provisional callus keeping the bones in their place. Pain is usual after the removal of the apparatus. Frictions,

and the application of a bandage, if any thing, is all that here is needed. Usually these pains subside, after a few days, by moderate motion and use of the limb. The Surgeon ceases attendance when convinced the apparatus can safely be dispensed with.

In case of curvature, I consider it practicable to straighten it by a judicious application of apparatus up to the 60th day after fracture. I make this statement from experience; ordinarily I do not conceive there is danger of breaking the provisional callus up to the time mentioned, by endeavoring to straighten a curve of the limb, if the means are judiciously employed. Much however would depend upon the nature and condition of the callus, the amount of the deformity, and the force required to bring the limb to its natural position. Fracture of the callus probably would not occur unless force was used directly for that object.

Dr. F. H. HAMILTON, sworn:—Is a teacher in Surgery, commenced teaching in 1885, now teach in the Buffalo Medical University; have examined plaintiff's leg; think it was two or three years since. Drs. Sprague and Delamater were present; it was a very careful examination. I found the thigh shortened about an inch; think there is a little lapping of the bones and some bend. I treat fractures of the thigh differently, depending upon age and circumstances; I have heard the testimony in this case. I should have placed the limb upon double inclined plane, a roller from toes to knee, 18 tailed bandage on the thigh, one splint I should think enough with the side boards and splints of this double inclined plane. I should pad the splint to fit; tie these splints with tape, and secure the foot to the foot-board. If there were no untoward symptoms I should not dress it for eight days. Then I would remove all the splints, open the bandages, examine the limb and replace it in the same way again in the box. I should give it supervision till I removed the box, in five or six weeks, if a man age 28; visiting, if nothing untoward, perhaps twice a week; at expiration of this time, I should remove the bandages and splints entirely; and require the patient to keep in bed, for eight or ten days, without putting his toe to the floor. Any other course would be the exception. Ordinarily I should dismiss the patient at this time, seeing him only once or twice in eight or ten days after. If, when I took the limb out of the box, it was straight, and in three or four days it was like Sims', I should attribute it to its being shortened in the box a little, and the crook to its being affected by spasmodic action or using the limb unduly. If told that in a few days after, he had had severe pains, or had got out of bed in two or three days I should ascribe the result to this and the weight used upon it. I think

bending might be a result of his getting out of bed alone, or by aid of a feeble woman; pain is not unfrequent after taking off the bandages. On Saturday morning I should not have had an idea that the limb was bent unless I was told by patient, or that he had been up, and should not examine the limb. My impression is that this cure is nearly but not quite an average. Out of eighteen cases which I have measured and therefore know the results, five were shortened two inches; only three were not shortened at all, two were of a child, but I could not say but that they were shortened. These were all oblique fractures. Fractures of the thigh in adults are generally oblique; transverse are uncommon, I have never met with one. In two of the five, the straight splint was used. In one case I unavoidably, left the leg shorter two inches. Surgeons are about equally divided in the use of the long splint or the double inclined plane. Most Surgeons are now of the opinion that oblique fractures of the thigh, in adults cannot generally be united without some shortening.

A crepitus, is not positive evidence that the bones have been reduced to their place, it is one of the evidences. This crepitus arises from the rubbing the ends of the bones together. It is ordinarily a grating, sometimes a click. I think a snap might be heard as much in an oblique as in a transverse fracture.

I know Druitt's modern surgery; the work is a very good compilation; he wrote it while he was a student, he told me so himself. He is in London. His personal authority here is worth nothing.

I know Chelius' Surgery, and the commentaries by South. I have reviewed the work; I know South personally; the reputation of the book is good. The text is better authority than South's. I should differ from Chelius if he said that when a leg might be removed from box, the patient might go around on crutches. He is not good authority, on all points—no writer is. (Counsel for plaintiff reads,) I don't consider the authority you read from Chelius is the most prudent. I differ from him in the rule for keeping on bandages. Chelius was a surgeon at Heidelberg; a teacher of ophthalmic surgery. South is not now a Professor, has been in the Royal College; I should say South exaggerated about the ease of keeping the bones in apposition.

DR. WILLARD PARKER SWORN:—I am a physician and surgeon; have been for 18 or 19 years; I am a teacher of surgery in the University of the State of New York, known as the "College of Physicians and Surgeons." I have had to do with a reasonable number of broken thighs and limbs; I have heard the testimony of Dr. Wilcox, in the case. Judging of the

case on the assumption that that testimony is true, I should say the practice of Dr. White had been good. Treatment depends upon the age and constitution of the patient. I would treat a case of fracture like this:—I should like to arrange the bed and choose my apparatus. I make the first dressing for the purpose of putting the parts in co-aptation and keeping them so. To keep the patient comfortable we apply the bandages and rollers. For the first eight or ten days, I always put patients on the double inclined plane. The splints on the box are generally all the splints that are required, and this is all there is to be done for the first eight or ten days. I should see that the patient was comfortable myself, or have some one see him. I use both the straight and flexed position. This is the flexed position in this box. The second dressing is for the purpose of looking at the limb to see if the bones are properly adjusted, for now is the time; the provisional callus is forming around it to support it. We assist nature until she assists herself. The callus does not begin to form, before the 10th or fifteenth day; it is formed in four or six weeks; we then lay aside the bandages and let nature take care of herself. I would see the patient the next day after the second dressing, and once or twice after; as a general fact, in from four to six weeks, you will find that you can lay aside the apparatus. After that, the patient must be kept still, not stir, but have the limb rubbed, &c. This is a statement of what I should regard as good practice. If the patient is unwell, we know the union is not as soon; any irregularity that exhausts the system, prevents the callus being well formed. In five or six weeks the callus can be flexed without breaking.

I thought the way Dr. Wilcox testified as to the examination made, was a proper way to test the strength of a limb.

If I found all right in six weeks, should not keep on any bandages after the box was taken off; think it good practice to leave the limb naked, as Dr. Wilcox testified at time. The callus in 47 days is as large as my hand, when it is clasped around the bone, it will feel large; it will be about two years, perhaps, that you will see only a feeble and last trace of the callus.

I don't think there was anything wrong in the conduct of Dr. White on Saturday morning, after the limb came out of the box, as detailed by the witnesses. It is just as it should happen, whether I should have looked at the limb or not. I suppose the limb came out straight and was afterwards found crooked; I have heard on Friday, of Hilliard's attempting to turn the patient around; on Saturday night he was sitting up. These things, I should suppose, would cause the spasms, and have a decided effect.

(Witness examines plaintiff's leg.) The well leg is a crooked thigh; don't feel anything like the bones passing by; the bend is in a way that might occur by hanging the leg over a bed—very like.

In children you will generally get an union without shortening; in a well active man you may not; it depends upon the muscles. The oblique fractures in muscular persons, are the most difficult to cure without shortening. Oblique fractures are the most common in middle aged persons; the curved thigh is the most difficult to manage.

I know Drutt's Principles of Surgery. I concur in the opinion expressed by Dr. Hamilton.

(*In cross-examination.*)—If a limb came out of box like plaintiff's, and I knew it had been kept quiet, &c., I should suppose it would required some explanation from the Surgeon. It might be caused without fault of patient or surgeon. If I should find limb like plaintiff's, I should propose to straighten it then, or in a few days; should as likely as not leave it out of the box; should not expect pains in limb in that condition more than if it came out straight. There is often pain; patients complain oftentimes, of decided pain after bandages are taken off.

I should leave a patient who should attempt to get up, as has been described, or I should give him a decided blowing up. I would not allow him to get up or move at all; should think that standing on his leg would be likely to produce severe pain.

Defence rests.—Cause is submitted to Jury by counsel, June 30th, and the Judge charged the Jury, as to the points of law, stating (as by counsel for defendant,) that if they were satisfied that the defendant had exercised ordinary skill, and ordinary care, they were to find for him. He then went into a general review of the testimony; stated that in cases like these the medical testimony should have more weight in matters of opinion, than testimony of other witnesses, as they were, it is to be supposed, better informed upon subjects of the nature here presented.

The Jury conferred with each other for a few minutes and returned a verdict for the defendant.

W. T.

Report of C. B. Coventry, M. D., on Epidemic Cholera. Addressed to the Faculty of the Medical Institution of Geneva College, and of the Medical Department of the University of Buffalo. July, 1848.

GENTLEMEN:—In accordance with my instructions, to "visit Europe for the purpose of investigating the causes, and ascertaining, as far as possible, the best mode of prevention, and treatment of the Asiatic Cholera," I sailed from New-York on the 12th day of January, 1848, reached Havre on the 7th of February, and proceeded the next day, to Paris. I remained at Paris between five and six weeks; went from thence to London, where I remained until the latter part of April, when my duties in the University of Buffalo requiring my return, I sailed for United States. In compliance, also with my instructions, I respectfully report the result of such investigations.

On reaching Europe, I found that the progress of the Cholera westward, was temporarily arrested. The political disturbances in different parts of the continent rendered travelling difficult, if not dangerous, and all conspired to induce me to abandon the attempt to meet the disease. I, however regretted this necessity the less, when I learned that the symptoms and characters of the disease were substantially the same as when it prevailed in this country in 1832, at which time I had ample opportunity, both in the city of New-York, and Utica, of witnessing its symptoms. The object of my mission was not so much to see the disease, as to ascertain whether it differed materially from the Cholera as it prevailed in this country in 1832, and to learn the views of the profession in Europe as to the causes, the best means of prevention, the pathology, and the treatment of this formidable disease. I am aware that some enlightened members of our profession considered such a mission unnecessary, and boasted that they knew how to treat the disease as well as any Physicians in Europe. I certainly would be the last to question their capacity and skill. It should, however, be remembered, that the profession are not all equally enlightened. You, at least, thought that there was something still to be learned, and believing it a duty of the medical profession to neglect no means of guarding against the "Pestilence that walketh by day," you did not hesitate to act. If there be any truth in the following observations of the able editor of the *Medico-Chirurgical Review*, no reasonable person would question, as it seems to me, the propriety of such a mission:

"We may presume that there is not one of our readers whose attention is not fully awake to the probability—we might almost say, the certainty—of the return to our shores of that dreaded visitant, whose progress has

never been checked in its course, or in any considerable degree averted by precautionary measures; the impenetrability of whose nature has hitherto defied the acumen of the most distinguished scientific investigation, and whose fearful results have left upon the minds, alike of the professions and the public, the lamentable impression of the utter incapacity of the resources of the therapeutic art to cope with its destructive energies."—*Med. Chir. Review*, January, 1848.

In addition to the opportunities of learning the views of the profession in Europe, I considered myself particularly fortunate in forming the acquaintance of Dr. Charles Searl, of Bath, England. Dr. Searl was long attached to the East India establishment at Madras, and during the prevalence of the Cholera in Europe in 1830, was physician-in-chief to the principal Cholera Hospital in Warsaw. Dr. S. published a work on the subject of the Cholera, some years since, and last season a new work on Cholera, Dysentery, and Fevers, combining the results of his vast experience and extended observation. Perhaps the highest compliment that could be paid to this work, is the fact that it has been furnished by the East India Company to all the medical officers in their employ, as the authority by which they are to be governed. It was no small gratification to find that the views at which I had arrived, were substantially the same as those embraced by Dr. S.; and although there is much diversity of opinion, I believe these views are those of a large portion of the intelligent of the profession, and, so far as regards contagion, are concurred in, by the very intelligent board of Health Commissioners of England, who have discarded the idea of the cholera being contagious. How much of suffering, and of expenditure of money, would have been saved by a knowledge of this single fact in 1832!

Causes of the Disease.—The Cholera, as is well known, has existed in India, from time immemorial, but has prevailed sometimes as an endemic, at others as an epidemic, since 1617, varying in severity in different years, usually endemic, and apparently depending upon causes analogous to those which produce cholera morbus in our own country; viz: a high degree of temperature combined with malarious exhalations, and often excited into action by sudden vicissitudes of temperature, and irritating and unwholesome food. Occasionally the disease becomes much more virulent, is more extended, and assumes the form of an epidemic.

The question of greatest practical importance, and on which the profession are divided, relates to the contagious or infectious nature of the disease. They who remember the scenes of 1832, well know the amount of money

expended in the establishment of quarantine regulations in every city and petty village, and their utter inutility in checking the progress of the disease. Speaking of the epidemic causes of the disease, Dr. Searl says:

"I may venture, without fear of contradiction, to say, that the influencing cause consists in some condition of the atmosphere which operates by reducing the active power of the system, and subverting the normal or healthy manifestations of life, and may, therefore, without impropriety, be called poisonous."

The ordinary causes, Dr. S. thinks, are similar in character and effect, though less active and virulent. They consist of the combined influences of the debility produced by long continued heat, the derangement of the biliary and associated organs resulting from a high temperature, and the poisonous influence of malaria, which is generated by the action of a tropical sun on vegetable and animal substances in process of decomposition. In these views I fully concur, but the limits of this report will not permit of our going into the evidences upon which such an opinion is founded.

The Metropolitan Sanitary Commissioners of England, in their Report presented on the 19th of February, 1848, say, "that the more recent experience in Russia has led to the general abandonment of the theory of its propagation by contagion, a conclusion in which, after a full consideration of the evidences presented to us, we fully concur." Although the idea that the cholera can be propagated by contagion in a healthy atmosphere is generally abandoned by the profession, there are many advocates for what is termed "contingent contagion," that is—that many diseases which are not communicable in a healthy atmosphere, may become contagious in a close, confined, or impure atmosphere. The number of believers in contingent contagion is increasing, and there is strong reason to believe that Cholera is one of the diseases to which the doctrine is applicable. Whilst the strongest evidence exists of its origin being independent of any communication with the sick, it is impossible to say that it may not be communicated in this manner in a contaminated atmosphere.

Whatever be the nature of the poison, and whether its primary action be on the blood, or the nervous system, the effect is evidently to prevent those changes in the circulation by which heat is generated, and the vital current purified. Carbonic acid is not formed by the union of the carbon with oxygen; heat is not generated; the blood, still charged with carbon, paralyzes the action of the heart, which, in its turn, becomes enfeebled; congestion of the internal organs follow, as in actual asphyxia; the nervous system being also paralyzed, the congested organs are incapable of retaining

their contents, and the watery portion of the blood escaping by transudation into the intestinal canal, is ejected by vomiting and purging—hence, the discharge—hence, the discoloration from retention of the carbon—hence, the extreme cold, in consequence of heat not being generated, and of the rapid evaporation from the surface—hence, also, the dark colour, and thickened consistency of the circulating fluid, and, hence, too, the reason why injection of saline fluids into the veins, seldom succeeds in restoring the patient, though it may revive him for a time, for it cannot remove the congestion of the capillary system.

Predisposing Causes of the Disease.—If we are correct in our opinion that the exciting cause is some poisonous influence in the atmosphere, then it is evident that any, and every cause which tend to exhaust and depress the vital energies, must render the system more susceptible to the disease, whether this be exhaustion from over fatigue, from want of proper nourishment, from want of rest, from dissipation, or from fear. Few things have a more depressing effect upon the vital energies than fear; and it was a common observation in 1832, that many cases of cholera were produced by fright. Dr. E. A. Parker, of London, in a recent work on the subject, has advanced, and endeavored to maintain the doctrine, that the poison of the atmosphere acts primarily on the blood. I am, however, disposed to believe that the condition of the blood upon which he founds his principal evidence, is not the primary affection, but that the impression is primarily on the nervous system, prostrating its energies, and thus preventing those changes in the condition of the blood, and nutritive processes, by which the blood is purified, and caloric evolved. Dr. Parker thinks that the changes induced in the function of respiration, are directly consequent upon the alteration of the blood, and are the proper and distinctive symptoms of the disease. We suppose, on the contrary, that the changes in the function of respiration are induced by deficiency in nervous energy, and that the altered state of the blood follows as an effect, instead of being the cause. In the post mortem examinations, made by Dr. Parker, it was found that the blood coagulated very imperfectly, or not at all. This appeared to be owing to the diminution, or entire absence of fibrin. The blood was found accumulated in the internal organs, in the large vessels, and right side of the heart, being dark colored, and of thicker consistence than natural. The greater consistence must be attributed to the serous portion of the blood having been thrown off by the copious evacuations by the stomach and bowels.

Symptoms.—The Commissioners to whom I have already referred, state, “that the disease, as it has recently appeared in Persia, in Trebizond, and in Russia, is unchanged in its general character;” and that “it is at the present time, according to the latest information, in a similar position to that in which it was in 1831, when its progress was arrested by the frost, previous to its advance upon Europe immediately after the thaw took place.” I shall not hesitate, therefore, in my account of the symptoms to describe those seen in this country in the epidemic of 1832. The first symptoms of Cholera vary very much, depending upon the intensity of the cause, the previous health and constitution of the patient, and the collateral and attendant circumstances. In most cases, the severer forms of the disease are preceded for a few days by more or less derangement of the stomach and bowels, loss of appetite, flatulence, and often diarrhoea. These symptoms may continue some two or three days, or may be present only as many hours. They are followed by frequent and profuse discharges from the bowels, not attended with pain, consisting, at first, of the ordinary contents of the bowels, but soon they become thin and watery, colorless, or of a light straw color, and hence not inaptly termed the rice water discharges. Nausea and sickness of the stomach, with vomiting, soon succeed, followed by cramps of the muscles of the extremities. To this succeed coldness of the surface and tongue; profuse clammy sweat; oppressed respiration, and the peculiar leaden hue of the countenance, which is characteristic of the advanced stage of the disease. In some of the more severe forms, the patient is suddenly seized with extreme prostration, vomiting, purging, and cramps, occurring almost simultaneously, and very rapidly succeeded by the algid state, or stage of collapse. In the most malignant form, the patient is suddenly prostrated, and expires, without passing through the several stages just described. The commissioners heretofore mentioned, consider the vomiting, active purging and cramp, as constituting the second stage of the disease; and what has usually been described as premonitory symptoms, viz. a slight diarrhoea, a sense of debility, flatulence, &c., as constituting the first stage.

Pathology.—The views expressed concerning the causes and symptoms of cholera, indicate our views of its pathology. As has been stated, we believe the first step in the morbid process is a depression of nervous energy, caused by the action of an impure air, which may act either from a deficient proportion of oxygen, or from containing an actual poison. As a consequence of this depressed nervous energy, those changes are not effected in the circulating fluid by which the carbon is eliminated; the

heart's action is impaired, or lessened, by this vitiated condition of the blood; congestion of the internal organs, especially of the portal system and right side of the heart, follow as a consequence. The vomiting and purging, which are usually the most prominent symptoms, should properly be considered as efforts of the system to free, or relieve itself of the congested state of the internal organs. The profuse sweats arise from the relaxed condition of the capillary system, from want of nervous energy, and should not be confounded with a healthy and natural sweat resulting from increased activity of the capillaries of the skin. The extreme cold, results, partially, from evaporation from the surface, but mainly, from the absence of those changes by which animal heat is generated. In the more malignant forms of the disease, the patient either sinks from the sudden prostration of the nervous system, or dies exhausted by the profuseness of the discharges. In the milder forms, reaction takes place; the discharges are arrested, and if the congestion is not too great, the balance of the circulation is restored, and the patient recovers. If, however, the disease has progressed too far, inflammation of the congested organs supervene, and we have a febrile condition resembling typhus.

Treatment.—If the views which we have taken of the causes and pathology are correct, it is self evident that there can be no specific for cholera; that what may be proper in one stage of the disease, would be inappropriate in another;—in short, that, like other diseases, it must be treated on general principles. All persons acquainted with Cholera admit, that few diseases are more manageable, or yield more readily to treatment, in its first stage. In the second stage, or after vomiting and purging, with or without cramps, have commenced, the result is very doubtful, and in the third, or what is usually termed the stage of collapse, the case is all but hopeless. The first, and most important step, is to impress upon community the necessity of applying for advice in the first stage, or during what have usually been termed the premonitory symptoms. The latter term should be abolished, as both incorrect, and injurious in its effects. The Sanitary Commissioners of England are undoubtedly right in considering this the first stage of Cholera; and were patients told, and impressed with the belief that they then had the disease, they would more readily submit to the necessary treatment, than if merely told they had the premonitory symptoms. Much undeserved odium has been cast on the medical profession from their supposed inability to cure cholera; whereas it was, in fact, only the advanced stage of the disease, and when the system

was no longer susceptible to the action of medicinal agents, that they failed to cure the disease.

In the first stage of the disease, the patient should confine himself to his bed, and take some mildly aromatic drink, such as an infusion of spearmint, or camomile, or warm camphor julep, until reaction takes place. The perspiration which follows should be encouraged by diluent drinks; this may also be promoted by a powder composed of three or four grains of Dover's powder, and one of calomel; or a pill composed of camphor gr. ss., opium and ipecac, ss. gr. one-fourth, calomel gr. i. repeated every two hours; after the sweating has continued three or four hours, the surface should be dried with warm flannel cloths, and a fresh and clean dress of flannel put on. When five or six of the pills have been taken, they should be suspended, and a small dose of rhubarb and magnesia, or of pure castor oil, should be given. Active, or drastic, or saline cathartics should not be given, and if castor oil is used, great care should be taken to see that it is pure and fresh. Most disastrous consequences have resulted from giving castor oil that was rancid. Mild nourishment should be given from time to time. If found necessary, the pills and cathartics may be repeated. The object should be to remove nervous prostration, and the congestion which has already commenced, by equalizing the circulation.

It is believed that this treatment is all that would be required in a large majority of cases, if seen in the first stage. Some modification is occasionally required. When there is nervous oppression at the stomach, without vomiting, a mild emetic will be found serviceable, and if the breathing is oppressed, the application of cups over the chest, and in some cases blood-letting may be required.

In the second stage of the disease the indications are the same, though modifications may be necessary in the mode of fulfilling them. If the patient is vomiting, he should be permitted to drink freely of some tepid drink. The spearmint tea, or weak chicken tea, may be used for this purpose. These should be continued though the patient continues to throw them off. Mustard cataplasms should be applied over the region of the stomach, and warmth to the surface. A good mode of applying warmth is by placing bags of heated salt along the limbs. The pills should be given as before, except that they should be more frequent, viz: every hour, or every half hour. We should not be deterred from giving the pills on account of the vomiting. If we succeed in correcting the vomiting and purging, the cathartics should be administered as before; waiting, however, some ten or twelve hours. Bleeding from the arm, and the application

of the cups, may in some cases be necessary, as before. In some cases, where an inflammatory condition of the stomach has supervened on the congestion, cold drinks will be preferred by the patient; in this he should be indulged. I have known small bits of ice, swallowed from time to time, directly useful, when it was found agreeable to the patient.

When the symptoms of cholera have been relieved, but the patient, instead of convalescing, falls into a typhoid state, it is an evidence that the congestion of the internal organs has not been fully relieved, and we must adopt such measures as the constitution of the patient will admit of; it may be V. S., counter irritation, or cupping over the region of the stomach, but I believe one of the most efficient means will be the use of calomel in small doses, so as to produce slight ptyalism.

In the third stage, or that of collapse, our chance of success is very slight, but the indications are the same as before. The first object must be to bring about a reaction; and for this purpose, in addition to the former means, the most powerful stimulants may be necessary to be employed. As soon as there are indications of reaction, bleeding may even be necessary in this stage of the disease, but not until reaction has commenced. It is impossible to point out all the modifications of treatment which the exigencies of the case may require, but they will readily suggest themselves to every intelligent practitioner. It may not, however, be improper to notice, very briefly, some of the remedies and means which have been used and recommended by different writers.

Opium.—Perhaps no article has been more used than opium. Looking only at two of the prominent symptoms, without adverting to the pathology, practitioners have given opium in large doses to check the purging and vomiting. The effect must have been to paralyze the nervous system, and increase the congestion. We are of opinion that opium can never be applicable in large doses in any stage of the disease. Given as recommended, in combination with calomel and ipecacuanha, it operates as a diaphoretic, and serves rather to excite, than prostrate the vital energies.

Calomel.—We have already expressed our opinion in favor of the administration of calomel, in small doses, with a view of exciting the secretions generally, and, under certain circumstances, carrying it to the extent of slight salivation. Doct. Searl considers calomel as a stimulant, exciting all the functions, including those of the heart and brain. He says, "that it does so, thirty years experience justifies me in asserting," and he adds, "it must of necessity (as it is a stimulant) act as an antagonistic agent also in suppression of the depressing influence of the cause of the

disease; and if this be the case, it is a remedy, to which, under ordinary circumstances, we might apply the term specific in the cure of this disease; and, as the fruit of all my experience, I fearlessly aver, that it is as much so, as it is possible any single remedy can be." Doct. S. gives it in much larger doses than we have recommended. The objection to the large doses, as recommended by Doct. S., is, that it is liable to act as a cathartic, and thus defeat its own object. In the worst form of the disease, all power of absorption is lost, and, as has been observed, "medicines taken into the stomach have no more effect than if they had been put in the coat-pocket of the individual."

Blood-Letting.—Much diversity of opinion exists as to the utility of this remedy. Doct. Searl says, that if "not always indispensable, it is clearly a remedy, when judiciously employed, from which much benefit may frequently be derived, and which general experience has proved to be the case." When in New-York in 1832, I was permitted, through the kindness of a medical friend, to try the effect of bleeding on a patient whom he had given up as hopeless. I tied up the arm, and made a free opening into a large vein, but, with all my efforts at rubbing the arm, I got scarcely an ounce of blood, and that very thick and dark colored. This patient subsequently aborted, flowed freely, and recovered. In the milder forms of the disease, and particularly in the first stage, I believe blood-letting unnecessary; and in the severer forms, where the fluids of the system have been already drained off, that it would be inapplicable. On the other hand where evidence of local congestion continues after reaction has taken place, bleeding should be resorted to, the blood should be taken with the patient in a recumbent position, and the effect on the circulation carefully watched. If the pulse becomes fuller and stronger, the blood should be permitted to flow, but, if not, should be immediately stopped.

Emetics have been highly recommended by several members of the profession, both in India, and Europe. No one can doubt the powerful influence of vomiting in equalizing the circulation. It is the mode instituted by nature herself. But I believe that in the first stage they are usually unnecessary, and when the patient is already vomiting, I can see no advantage from their administration. In appropriate cases they are useful, but I must object to the administration of tart. emetic, and particularly in two grain doses, as recommended by some writers.

Saline Injections into the rectum, are strongly recommended by Doct. Searl. He says, "A large tea spoonfull of table salt dissolved in a pint of warm gruel, or water, and used as a clyster every half hour, the patient

continuing in the recumbent posture, and passing it afterwards into a cloth, cannot be too strongly advised, and especially so, when vomiting is frequent, or spasms severe."

Nutritive Injections are strongly recommended by Doct Searl, as a means of sustaining the system when every thing is ejected from the stomach.

Saline Injections into the Veins were, at one time, very highly extolled, during the former epidemic. Although the effect for a time was almost miraculous, patients often arousing from a state of insensibility, yet, unfortunately, this excitement was only temporary, the patient soon relapsing into his former condition. The operation is a difficult, and delicate one, and not without danger. Patients have occasionally recovered after such injections. It certainly would be improper to resort to injections into the veins, except in those cases which were hopeless from ordinary treatment.

Inhalation of Oxygen Gas, and the Nitrous Oxide.—I am not aware that the inhalation of Oxygen has been tried in Cholera, though strongly recommended by Doct Searl, and some others. It would certainly be worth a trial in the severe forms of the disease. It is possible that we may find in this powerful agent a stimulant that would raise the system when other stimulants failed. The slight increase of oxygen produced by the combustion of nitre in the apartment, will sometimes relieve the suffering from asthma, and may, perhaps, prove beneficial in cholera.

Means of Prevention.—Whatever diversity of opinions may exist as to the contagious or non-contagious character of the disease, I believe that the profession, both in Europe, and this country, are nearly unanimous in the opinion that the quarantine regulations established in 1830-32, did not, in a single instance, prevent the occurrence, or limit the extent of the disease. On the contrary, whilst attended with great expense, they increased the panic, often prevented the possibility of procuring proper attendance on the sick, and caused the hurried, improper, and indecent interment of those who died, or were supposed to be dead. Dr. Searl says, that in the Cholera hospital at Warsaw, whilst under his charge, there was an average of from 30 to 60 cases under treatment; of this number half a dozen were buried daily. "Of thirty, or more attendants during three months that I was in charge, we had among this number only two cases of the disease, and the cause of the attack, in both cases was most satisfactorily explained. One of these men was not employed in attendance upon the sick, but in the kitchen preparing the food, and daily frequenting the shambles; the other, an hospital attendant, whom the apothecary finding intoxicated, had locked up

during the night in a damp cellar, with no covering but his shirt." A commission was sent by the French Government, who visited the hospital under the charge of Dr. S., and who tried a variety of experiments on animals, and on themselves, by taking the breath, and by inoculating themselves with the blood and excretions of the patients, without producing the disease. Dr. S. also mentions the fact of a gentleman having died of Cholera in his bed, and his occupying the same room, the same bed and clothing, the following night, without getting the disease.

Dr. Searl adds: "To these facts I may add those of daily occurrences in India, the disease attacking exclusively the men occupying the lower floor of a barrack, while those of the upper floor escaped; of its attacking the men sleeping on one side of a ship's deck in the roads, off Madras, only, or one portion of a cantonment, or the inhabitants of one bank of a river exclusively; or of the disease attacking a regiment on its march most virulently to day, and ceasing on the regiment's moving a few miles on the morrow." Another circumstance mentioned by Dr. S. as militating against the doctrine of contagion is, that, so far as we know, in all contagious diseases, the poison is generated by a febrile action of the system, whilst, in Cholera, there is no such febrile action. Dr. Parker, whom we have before quoted, "has never observed any indication of contagion in Cholera, all the phenomena of propagation, and development of the virus, which have fallen under his own observation, being sufficiently accounted for, without calling in the aid of the hypothesis that the virus can multiply itself by its action on the living human system." In the *Medico-Chir. Review* for January, 1848, we find the following observations:—"A general review of the whole case, then, leads us to this conclusion, that where the epidemic influence is strongly developed, infection is not likely to have any perceptible influence in propagating it; that the general march of the disease cannot be dependent on human communication, and that quarantine regulations, and similar restrictions upon intercourse, are utterly incapable of checking its progress; and that if human communication be in any case the immediate agency in its transmission, it can only be so when a strong predisposition has been occasioned by epidemic influence being dependent upon those health-destroying conditions which it is the object of the sanitary reform to remove." Dr. Milroy quotes, as the motto to his pamphlet on the Cholera, the following emphatic declaration of Mr. Farr in the report of the Registrar General:—"Internal sanitary arrangements, and not quarantine or sanitary lines, are the safe guards of nations against epidemic diseases."

Dr. Milroy says, "As surely has Cholera always sought out, and settled down upon the abodes of misery and filth, in every city of Europe, that has been visited by it, as the vulture-crows in the East, ever congregate where there is the most offal and garbage to be found." I will not go so far as to assert, that in an impure atmosphere, where a strong predisposition already exists, it may not be excited into action, by intercourse with the disease. This is a question which we have no means of determining. During the prevalence of the Cholera in 1832, I visited the several Hospitals in New York, which were filled with patients, in every stage of the disease; visited patients in the same city, in the worst abodes of poverty, wretchedness and filth; and during its prevalence in Utica, I was constantly engaged in attendance upon the sick, often sleeping in an apartment adjoining that of my patient, without contracting the disease. I am fully satisfied that many of the regulations adopted in 1832, although adopted with the best of motives, did more harm than good. No human agency has yet been found sufficient to arrest the progress, or avert the attack of the destroyer. But although we cannot prevent, much may be done to mitigate the severity of such a visitation. This is to be done by a careful removal, as far as possible, of every source of impurity of the atmosphere, and obviating all the ordinary causes of disease, by enjoining on the people the importance of strict temperance in eating, as well as drinking—the avoidance of everything that has a tendency to enervate or exhaust the system, and particularly the avoidance of drastic cathartics—in short, the strict observance of the Laws of Health. The medical profession should urge upon community, the importance of attending upon the first premonition of the disease. The first indication of derangement of the stomach or bowels, should be sufficient to confine the patient to his bed, and to send for medical advice. It is the universal testimony of the profession, that the disease usually yields readily to treatment in the first stage. The establishment of Cholera Hospitals, with the exception of particular circumstances, is worse than useless. Patients will not resort to them in the first stage of the disease, and their removal in the second stage, would be hazardous, if not fatal. The Sanitary Commissioners of England, say: "That the views which we have adopted in relation to the inexpediency of special Cholera Hospitals, except in cases of peculiar necessity, have been confirmed by the coincident adoption of the same conclusions in Russia." Should this scourge again visit our State, (which there is much reason to fear) special Cholera Hospitals would be necessary at all the cities and large villages on the line of internal navigation; not for the

accommodation of the citizens, but for the prompt removal of persons sickening on boats, who would not find accommodation in private dwellings. A sufficient number of medical attendants should be engaged, at the public charge, to render prompt assistance in all cases where such attention may be required, and the corpse of no person, dying from Cholera, should be interred, until permission was granted, either by the public authorities, or the physician in attendance. There are few diseases where the danger of premature interment is so great as in cholera. The sudden prostration of nervous energy, as well as the sudden and profuse discharge of the fluids of the system, must frequently produce a state of syncope, which, in a time of general pain and alarm, might readily be mistaken for death, by an incautious observer. Fortunately, no necessity exists for a hurried interment. No poison has been generated by febrile action, which might contaminate the surrounding air, and thus prove injurious to others; decomposition is even slower in taking place than in deaths from ordinary causes. In no case should the body be interred in less than twenty-four hours after death.

I cannot consent to close my communication, without improving the opportunity of expressing my obligations, for the many marks of attention which I everywhere received from the members of our profession. I could not but feel proud of belonging to a profession that acknowledges no distinction of country, of language, or of creed, but whose members, when known, are everywhere received by members of the same profession as brethren.

I would more especially express my obligations to Dr. Pritchard, of London; Dr. Carpenter, Mr. Wm. Lawrence, and Samuel Cooper, of London, and Dr. Charles Searl, of Bath, England.

UTICA, July, 1848.

ART. III.—*Case of Bending and Partial Fracture of the Clavicle.* By
C. GREEN, M. D., Homer, N. Y.

Dec. 21st. 1847.—Was called to dress, what was supposed to be a fractured clavicle, of George Stone, a lad eight years of age. One of his playmates had tripped him in such a manner that he fell on his side, striking on the extremity of the left shoulder. I found that he was unable to raise the hand to the head. On examination, I discovered on the posterior edge of the clavicle, at the inner extremity of the external curvature, a point which was swollen, tender, and painful. The anterior edge of the clavicle was continuous, and there was neither crepitus, nor displacement. Considering the age of the patient, and the appearance of the parts, I diagnosed, bending of the clavicle forward, with a *splitting out* of the posterior edge; and that the bone, by its elasticity, had resumed its ordinary direction. In order to be safe, however, I dressed the shoulder as for actual fracture of the clavicle, lest the fracture *might* have extended nearly through the bone, and there be subsequent displacement. The swelling subsided in 4 or 5 days, and as all seemed secure, I removed the dressings, and heard no more of the matter until the 11th of May, ult., when I was called to see this patient again; and found that he had met, the day before, with precisely the same accident, at the old point, and by the same cause—being tripped down by a playmate. This time, the swelling, and other symptoms of inflammation were greater than before. The anterior edge of the clavicle was entirely continuous, but he could not raise the arm. I merely directed him to keep to his bed until the swelling and inflammation should, in a measure, subside. In three or four days he was about. The callus left is not large, still it is quite evident.

I have had one well marked case of bending of the radius and ulna, in a boy eight years of age, and other surgeons have detailed similar accidents to the fore-arm, and, more rarely, cases of incomplete fracture with bending of the humerus, leg and thigh; but as a like bending of the clavicle is much less common than either of the others, I have thought this case possessed sufficient interest to make it worthy of being reported.

Homer, June 27th, 1848.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

On the theory of Spasmo-paralysis in Infants and Adults. By MARSHALL HALL, M.D., F.R.S., &c. London.

Paralysis may depend on the exclusion of the influence either of the cerebrum, or the spinal marrow—that is, of both cerebrum and spinal marrow. Spasm can only arise from irritation of some part of the *spinal* system; but this irritation may affect the incident excitor nerves, the spinal centre, or the muscular nerves. Spasmo-paralysis is a term which I have adopted to express the varied combinations of spasm and paralysis, which occur so frequently in practice.

How shall we find our way through this labyrinth?

It may, indeed, be said that the diseases of the nervous system constitute one-third part of medicine, and that their accurate diagnosis was impossible, previous to the distinction of the three divisions of that system from each other. Now, this distinction depended, in its turn, on the detection and separation of one of these—the reflex spinal system—from the other two—viz: the cerebral and ganglionic; and this again, in its turn, affords the diagnostic of the diseases of the entire nervous system.

Such is the important practical object to which I wish to devote myself, while I leave the mean and ignoble caviller at the threshold of this true temple of medical science.

Infants are often born with distortion of the foot or feet, and during growth a paralytic weakness and atrophy are conjoined with the spasmodic action of the deforming muscle. A similar effect is sometimes seen to take place during infancy. I have once seen a case, in an adult, in which the tendo Achillis became so drawn that the patient could no longer put the heel to the ground. In some cases of hemiplegia, spasmodic contraction of the ham and arm accompanies the paralytic attack. In other cases, a spasmodic contraction of the hand gradually takes place more remotely after the attack. I have seen various cases of paralysis, or spasm, distinctly, and of the two either variously combined or following each other. Now what is the just rationale—what the theory of these spasmo-paralytic cases?

These questions could not be answered before the appearance of the remarkable work of M. Flourens, or before the detection of the reflex spinal system. The due limitation of the excitor and *in*-excitor portions of the nervous system, which we owe to M. Flourens, and the just appreciation of the incident and reflex forms of action, of their excito-motor powers, which has flowed from my own investigations, are the essential preliminaries to an investigation of the theory of spasm, of paralysis, and of

spasmo-paralysis. To this very day I observe these things confounded together, and that, even by teachers of our pupils, and critics of our literature.

Intra-uterine Spasmo-paralysis.—How interesting and how valuable would be a series of accurate cases and post-mortem examinations of the various congenital spasmodic and spasmo-paralytic affections! of cheirismus, and especially of podismus, in the varied forms, or rather deformities, of club-foot.

Is the cause of this calamity always of centric origin? or is it sometimes the reflex action of external cold, injury, &c?

The class of intra-uterine diseases still requires renewed investigation, and no part of it more than affections of the nervous system.

Effusion over the hemispheres, and at the base of the encephalon, and along the spinal canal, is too frequently the cause of irritation—pressure or counter-pressure—on the spinal system, that division of the nervous system endowed with the excito-motor power. This irritation is the source of various congenital, convulsive or spasmodic affections; it may be the cause of strabismus, laryngismus, &c., of the various distortions of the hands, and especially of the feet. In the case of two brothers, similarly affected, the tendo Achillis was permanently contracted with spasmo-paralysis of both legs; on the death of one, aged twelve, effusion on the cerebral hemispheres, at the base of the brain, and along the spinal canal, was found in considerable quantity; the arachnoid was thickened, and, over the lateral portion of one hemisphere, converted into a thin layer of bone.

Of Spasmo-paralysis in Infants and Children.—Spasmo-paralysis in infants and children, is of centric and ex-centric origin—the prognosis of the former being, of course, far more formidable than that of the latter.

Teething, and gastric, and intestinal, irritation, and, I suspect, exposure of the naked surface to the cold, are the causes of the reflex or ex-centric forms of this malady. From such causes, I have seen hemiplegia of the arm, or of the leg, or of both; and the proof that the affection was of reflex origin was a very happy one—viz: speedy recovery.

The event, however, is not always so fortunate.

Sometimes both legs are affected, and this affection is sometimes more observed in one leg than in the other; sometimes the spasm, sometimes the paralysis, predominates; and sometimes one leg is affected with paralysis, whilst the other is affected with spasmo-paralysis.

Spasmo-paralysis in the Adult.—But of all the cases which have come under my observation, none has been more replete with interest and anxiety, than the spasmo-paralysis occurring in the adult period of human life.

It is well known that the epileptic convulsion sometimes leaves one arm, one leg, or one side, paralytic or hemiplegic, in a greater or less degree. If the seizures were not to be repeated, I imagine this paralysis would frequently subside, being the effect of shock, and of the common cause or causes of the convulsion, and of the hemiplegia, which is, therefore, not permanent. But if the shock be repeated, the paralysis may be permanent, although the convulsion subside.

In one most interesting case, a lady, aged thirty-five, was seized with violent convulsion of the left side of the face, and of the left arm, the leg being unaffected; when the convulsion ceased, the face and arm were left

extremely, if not perfectly paralytic. A degree of amendment took place; but the convulsions returned, occupying the same seats as before, and, on ceasing, again left the face, arm, and hand, absolutely paralytic.

This lady once had phlegmasia dolens after parturition, and this leg again became swollen. But the cause of the attack of convulsions seemed to be discovered in the condition of the intestines; for these convulsions were relieved by purgative medicines, but were excited, if those medicines acted too violently.

From the paralysis left by this serious attack or repetition of attacks, the patient recovered completely—an additional proof that the affection had, like many cases of epileptic seizure, arisen from some cause ex-centric to the encephalon or spinal marrow. And how invaluable is this fact, in reference both to our prognosis and treatment!

Indeed, I may here observe, that spasco-paralysis is, in every respect, a disease of less hopeless character than pure paralysis, inasmuch as the irritation of an organ is a less severe affection than its destruction. The diagnosis, or the detection of the cause, is the first great object of the physician, and especially the determination of the question—whether that cause be seated centrally or ex-centrally.

In one case, which occurred in a member of our own profession, after repeated threatenings supposed to be apoplectic, severe spasco-paralysis supervened, and remained permanent. Bleeding had been resorted to constantly as the preventive. It ought, I believe, to have been decided, but not too severe, antacid aperients, with a strict attention to the diet, which should not have been of a mere vegetable, but of a light and digestible character.

There was, I believe, more of the epileptic than of the apoplectic in those threatenings. Is there any physical lesion? Is the case, or was the case, one admitting of recovery? How deeply interesting are all these questions!

It is plain that the new topic—new because now viewed distinctly—of spasco-paralysis, will assume an important position amongst the objects of the physician's studies.

I have two patients under my care at this time, with podriismus, occurring at the ages, in one, of twenty-five, in the other, of forty-five. Both are females. In the first, the right foot is drawn upwards and inwards, and so severely as to induce great tenderness and swelling of the outer ankle. Various symptoms of nervous origin are conjoined with this deformity of the foot. In the other, the tendo Achillis in each leg is tense, and the toe only, and not the foot, much less the heel, can be put to the ground. In this case almost every article of food or medicine is rejected by vomiting.

I do not believe that either of these cases is hysteria. There is no other symptom of hysteric character, and the temperament in both patients is staid and sedate.

Conclusion.—From the recent progress of the physiology of the nervous system, we are now enabled to conclude—

1. That *paralysis*, pure paralysis, *may* be an affection either of the cerebrum, the spinal marrow, or the nerves; but
2. That *spasm must* be an affection of some part of the true spinal system; and

3. That spasm-paralysis must at least involve in it an affection of the true spinal system, either primarily or secondarily.

There is only one exception to this last rule: it is the case of severe hemiplegia, in which, from the mere facts of the severing of the influence of volition, and the normal or physiological action of the spinal marrow—the source at once of the irritability of muscular fibre and of tone—the affected hand frequently becomes spasmodically flexed.

Here I conclude this brief paper. I think I have clearly shown in it, once more, how important, how essential, physiology is to the physician, and pointed out a distinction to be carefully drawn between paralysis, and spasm, and spasm-paralysis, as at once a guide to our prognosis and our treatment.—*London Lancet.*

Proceedings of the Third Meeting of Association of Medical Superintendents of American Institutions for the Insane.

The Association of Medical Superintendents of American Institutions for the insane, commenced its third meeting, at the Astor House in the city of New York, on the 8th of May 1848, the Vice President, William M. Awl, M. D., in the Chair, and Thomas S. Kirkbride, M. D., Secretary.

Present—Dr. James Bates, of the Marine Insane Hospital at Augusta; Dr. Andrew McFarland, of the New Hampshire State Hospital at Concord; Dr. William H. Rockwell of the Vermont State Hospital at Brattleboro; Dr. Luther V. Bell, of the McLean Asylum for the Insane of Somerville, Mass.; Dr. C. H. Stedman, of the Boston Lunatic Asylum; Dr. N. Cutter, of the Private Institution at Pepperill, Mass.; Dr. John S. Butler, of the Connecticut Retreat at Hartford; Dr. Amariah Brigham, of the State Lunatic Asylum at Utica, N. Y.; Dr. Pliny Earl, of the Bloomingdale Asylum N. Y.; Dr. James Macdonald, of the Private Institution at Flushing, L. I.; Dr. — Renney, of the Lunatic Asylum on Blackwell's Island, N. Y.; Dr. G. H. White, of the Hudson (private) Lunatic Asylum, N. Y.; Dr. Horace A. Buttolph, of the New Jersey Lunatic Asylum at Trenton; Dr. Thomas S. Kirkbride, of the Pennsylvania Hospital for the Insane at Philadelphia; D. Joshua H. Worthington, of the Friends' Asylum at Frankford, Pa.; Dr. N. C. Benedict, of the Blockley Insane Asylum at Philadelphia; Dr. Fonerden, of the Maryland Hospital at Baltimore; Dr. Wm. M. Awl, of the Ohio Lunatic Asylum at Columbus; Dr. John M. Galt, of the Eastern Asylum of Virginia at Williamsburgh; and Dr. John R. Allan, of the Kentucky Lunatic Asylum at Lexington.

Dr. Samuel B. Woodward tendered his resignation of the Presidency of the Association, which was accepted, and Dr. Wm. M. Awl was elected president in the place of Dr. Woodward, resigned; and Dr. A. Brigham, Vice President, in the place of Dr. Awl, elected President. The following preamble and resolutions in reference to its late President, were unanimously adopted by the Association, viz:—

Whereas, Dr. Samuel B. Woodward, at the present meeting of the Association, has tendered his resignation as President thereof,

Resolved, That whilst accepting this resignation, we cannot adjourn without declaring our high sense of the services of Dr. Woodward, as

President of this body, also our full appreciation of his his ardent and useful exertions for so many years in behalf of the unfortunate insane.

Resolved That the Secretary of the Association be requested to transmit to Dr. Woodward a copy of this resolution.

Agreeably to appointment, Dr. Brigham read an obituary notice of the late Dr. White, of the Hudson Lunatic Asylum, and the Vice President of this Association, which was directed to be entered upon the minutes.

Dr. A. V. Williams and Dr. Benj. Ogden, two of the visiting physicians of the Asylum on Blackwell's Island, were invited to attend the sittings of the Association; and a resolution was adopted, authorizing each member to invite any person interested in its discussions.

In conformity with a resolution, adopted at the last meeting of the Association, Drs. Brigham and Macdonald made written, and Drs. Earl Rockwell, Bates, Butler, Allan and Kirkbride, verbal reports on the subject of post-mortem examinations, and the pathology of insanity, which, after consideration, were referred to the standing committee on these subjects.

Dr. Kirkbride read a report from the committee on publications, which was accepted, and the association subsequently resolved, that the committee on publication, appointed at the last meeting, be continued, and instructed to publish such of the reports, and such parts of the reports made to this association, and such parts of the proceedings as they shall deem conducive to the public good.

Elevations and ground plans of many of the institutions for the insane in the United States and Canada, were laid upon the table, for examination by the members of the Association; also a great variety of carving and fancy work, made by the patients in the New York State Asylum, and a number of ingenious buckles and other improved fixtures, intended to be employed on restraining apparatus, and sent to the Association by the maker, Mr. John D. Fisher of Philadelphia.

Written reports were made on the following subjects, and after full discussion accepted, and laid upon the table, subject to future disposition by the Association, viz:

On the comparative value of the different kinds of labor for patients, and the best means of employment in winter, by Dr. Rockwell; on the advantages and disadvantages of cottages for wealthy patients, adjacent to hospitals for the insane, by Dr. Kirkbride; on the relative value of the different kinds of fuel, for heating hospitals, by Dr. Bates; on the most economical mode of treating the insane of the poorer classes, by Dr. McFarland; on reading, recreations, and amusements for the insane, by Dr. Galt; on the comparative value of treatment in public institutions, and private practice, by Dr. White; and on the effects of the insane, of the use of tobacco, by Dr. Cutter.

Remarks on the diseases and causes of death among the insane, were also read by Dr. Macdonald; on the statistics of insanity, by Dr. Earle; and a series of cases of mania-a-potu, treated by the inhalation of ether, in the Boston City Hospital, by Dr. Stedman.

Invitations were received and accepted, to visit the Bloomingdale Asylum under the care of Dr. Earle, and the private institution at Flushing, L. I., under the care of Dr. Macdonald; and both institutions were subsequently visited, and examined with great satisfaction, and the thanks of the Asso-

ciation tendered to these gentlemen, for their courtesy, attention, and bountiful hospitality.

The association also accepted an invitation to visit the Asylum on Blackwell's Island, and, after a thorough examination of the buildings and arrangements, unanimously adopted the following resolutions:—

Resolutions respecting the Receptacle for Pauper-lunatics on Blackwell's Island.

The "Association of Medical Superintendents of the American Institutions for the Insane," holding their biennial meeting in this city, have availed themselves of the kind invitation of the civil authorities superintending the receptacle for the pauper lunatics of this great metropolis, at Blackwell's Island, to visit and examine the unfortunate class there resident, and the provision made for their care, their amelioration, and their recovery.

It would be far more grateful to their feelings, could they leave this, as they do the other asylums for the insane, in this vicinity, which they have also examined, in silent but respectful regard, at seeing great objects properly accomplished. In so doing, they would escape the unpleasant necessity of instituting painful criticisms in the face of personal civilities, and the hazard of being considered by the unreflecting, as guilty of improper interference in the affairs of community not their own.

Devoted, as many of them have been, for many long years of their lives, to the care and restoration of those deprived of reason; familiar, as many of them have been from personal examination, with the condition of this class of sufferers under the varying circumstances of the different communities of the old and new world; looking upon themselves, while citizens of widely separated states, yet common denizens of that republic of humanity that knows no state lines, they willingly venture all risk of being misunderstood and misrepresented, when they declare their conviction, that the arrangements for the three or four hundred pauper lunatics of this city, are far in the rear of the age, of the standard of other regions equally advanced in civilization and refinement, of the imperative demands of common justice, humanity, and respect due to the image of a common Father, however much disfigured and changed.

They would, therefore, appeal to the authorities of this mighty and opulent metropolis of the western world, to sustain the honor of their leading position; to those who must feel that they, and their children have no immunity against loss of property, of friends, and of reason, to those who recognize the obligations imposed by their own elevation and success to protect the friendless and miserable, to interpose their determined resolution no longer to permit the Empire City to stand below the demands of the age, in the justice, humanity, yea, in the common decency, with which those guilty of no crime, but stricken by the hand of Providence in the loss of reason, are treated. Suffer no longer, we implore you, those whose sensibilities are not extinguished, but may even be more intense, whose honest self respect and pride of character is not always permanently obliterated, whose return to society and to usefulness is not elsewhere the rare exception, but the expected result, to be abandoned to the tender mercies of thieves and prostitutes, who are, to a considerable extent, the associates and keepers of this helpless charge, and clothed with all the delegated authority and influence, which such a relation necessarily implies.

This Association has neither the means nor disposition to inquire why the pauper lunatics of this community should have been allowed to lapse into that depth of degradation and neglect, of which it would be difficult elsewhere to find a parallel.

Enough is it for them to know, that such is the fact, notwithstanding plans and designs for every modern architectural requirement, as well as curative and ameliorating appliances, have been long in the hands, and subjected to the favorable criticism and comparison of those elsewhere charged with the same duties, and have been recognized as fully adequate to meet the exigency.

They have examined the recent report of the medical visitors, and conclude with them fully in their conclusions, as to the necessity of an entire change in the system; in the impossibility of doing all that justice, humanity, and a sound economy require for the insane, except at a cost of money sufficient to provide faithful, competent, respectable assistants or keepers, and adequate means of classification, inspection, labour, amusement, ventilation, and cleanliness. They believe a just economy requires the abandonment, or conversion to collateral uses merely, of those miserable apologies for insane hospitals, known as the old and the new *mad-house*; and that if the island is retained as a site for these institutions, the original design, fully satisfactory in its great outlines and principles, should at once be carried out to completion.

The following preamble and resolution were adopted by the Association, viz:

Whereas, in the selection of medical superintendents to American institutions for the insane, it is important to choose men with the highest qualifications, both as respects professional acquirements and moral endowments, therefore,

Resolved, That any attempt, in any part of this country, to select such officers through political bias, be deprecated by this Association as a dangerous departure from that sound rule which should govern every appointing power, of seeking the best men, irrespective of every other consideration.

The following resolutions were also adopted during the different sessions of the Association:

Resolved, That a committee be appointed to report to this Association, at its next meeting, the best terms for the classification and designations of the different forms of insanity, and also the best anatomical and pathological terms for the various parts of the brain, and a nomenclature of the diseases which prove fatal to the insane.

Resolved, That a committee be appointed to suggest the best plan of calling the attentions of physicians in general practice to the proper treatment of the insane at their homes, and especially to their treatment during the first period of their disease.

Resolved, That the members of this Association be requested to prepare and present to a future meeting, a statistical analysis of all the cases of insanity which have been admitted into the different institutions under their care.

Resolved, That all subjects heretofore referred to committees, and not reported on at this meeting of the Association, be continued in the hands of the present committees for future action.

Resolved, That a committee be appointed who shall, either before or after our adjournment, select subjects and appoint members to report on the same, in writing, at the next meeting of the Association.

Resolved, That previous to the future meetings of the Association, the secretary be requested to invite the Boards of Trustees, managers, or official visitors of each insane asylum on this continent, to attend the sessions of this body.

Resolved, That the thanks of this Association be tendered to Messrs. Coleman & Stetson, of the Astor House, for their very liberal provision for the meetings of the Association, and for which, on account of its benevolent objects, they have declined receiving compensation.

Resolved, That the thanks of the Association be tendered to the officers for the able manner in which they have performed the duties of their respective stations.

Resolved, That the Secretary be instructed to furnish an abstract of the proceedings of the Association to the editor of the American Journal of Insanity, and to the editors of the various Medical Journals in the United States, for publication in their respective periodicals.

The Association continued its sessions until the afternoon of the 12th of May, and then adjourned to meet in the city of Utica, N. Y., on the third Monday of May, 1849, at 10 o'clock, A. M.

By order of the Association,

THOMAS S. KIRKBRIDE, *Secretary*.

Surgery and Physiological discoveries in Paris—New method of treating Fractures—M. Bernard's researches—Pancreatic Juice—Bile—Curious Physiological Experiments.

[The following letter from Prof. March, we copy from the Boston Med. and Surg. Jour., and is addressed to the Editor of that Journal.—Ed.]

MY DEAR SIR,—Believing that you, and the readers of your Journal, might feel some interest in the new things of the medical profession of Paris, I propose to give you a brief account, or some sketches, of what fell under my observation during a short residence there of five weeks. I will also send you an extract from a letter of deep interest, which I received a few days since from a talented American medical friend, who has been residing in Paris for the last two years.

My time, during the hospital hours of each day, was mostly spent in the surgical wards of the Hotel Dieu, Hopital la Charité and Hopital St. Louis. In Hotel Dieu I saw much of the practice and surgical operations of M. Roux, M. Blandin and M. Boyer (the son of the author of "Boyer's Surgery"). In Hopital la Charité I followed Velpeau pretty generally; though I saw him operate less frequently than the surgeons of Hotel Dieu. In Hopital St. Louis, Jobert is the prominent and leading man in surgery—although Malgaigne, who is a man of genius and of great energy of character, is fast gaining notoriety for his novel mode of treating oblique fractures of the tibia. I will not attempt to give you any account of the numerous operations which I witnessed in the Parisian Hospitals—nor of the good and bad surgical practice which came daily under my observation,

as such as has been observed and described again and again by many experienced American surgeons—but will speak only of such points as, to me at least, were new.

Chloroform is universally and very successfully used by the surgeons of Paris; and withal, with more prudence and caution than we Americans are wont to regard the estimate in which human life is held by the bold French surgeons.

M. Jobert, who is perhaps 48 or 50 years of age, and who possesses a very commanding personal appearance, I consider one of the most growing surgeons of Paris. He is perfectly fearless, as his look indicates, and energetic in all his movements. He has a peculiar mode of treating fractures, which consist in adopting the principle of extension and counter-extension *alone*. He uses no *splints* nor *bandages*. He lays the limb on a plain, and somewhat firm surface, with its extremity a little elevated. In fractures of the thigh, or leg, he casts a roller a few times around the ankle and instep, and fixes the foot to the foot-bar of the bed; then a folded sheet or perineal belt is placed under the upper part of the *opposite thigh*, across the perineum and groin, behind the shoulder of the patient, and securely fixed to the head-bar of the bed. The patient is thus confined to his back; but the broken limb receives no pressure, directly or indirectly, in the seat of the fracture, which is perfectly *naked* and exposed for inspection, without any undressing or movement of the limb. I even saw a case of fracture of humerus under the same mode of treatment.

You will probably inquire, with what success was this strange practice attended? I answer, generally pretty favorable. But I now hasten to give something still more new and startling in the practice of M. Malgaigne, to me at least, although it may not be new to you and the readers of your Journal.

One morning, in visiting his ward, I saw a stout, healthy-looking man, of about 40 years of age, lying upon his back, with fracture of the tibia and fibula about five inches above the ankle, which occurred fifteen days before. There was considerable obliquity in the direction of the fracture of the tibia, as was observable by the projecting and overlapping point of the lower extremity of the upper fragment. Inflammation and tumefaction had, in a great degree, subsided; and the limb was resting on a back splint with a foot-piece covered by a cushion, and sustained by lateral cushions and lateral splints—and I believe a cold linseed-meal poultice had been applied to the seat of the fracture, to abate inflammation. All the anterior surface of the limb was naked. So much for the condition of the fracture and the limb, and the apparatus with which it was surrounded, Now for the new and superadded apparatus, and its object:—

The new apparatus consists simply of a steel plate or yoke, moderately semi-lunar, an inch and a half wide, and about eight inches long, with a mortice or fenestrum at each extremity, through which a broad piece of webbing is passed, having on one end a buckle attached, and a *screw pin*, two and a half or three inches long, with a thumb-piece at top, and a sharp bodkin-like point below for half or three fourths of an inch, which passes through a female screw in the centre of the plate or yoke. A handkerchief, or long towel, was passed around the ankle and instep, with the ends extending below the sole of the foot, with which powerful extension was made, while counter-extension was made from the knee, by which the over-lapping point

of bone receded, and was readily brought into its proper place. Next, the centre of the yoke, occupied by the *screw pin*, was placed over the upper fragment of the tibia, about an inch and a half from the heretofore projecting part, and the *belt*, made to encircle the base and lateral splints, was tightly buckled; so that the *point* of the *screw pin* was made to perforate the skin on the anterior face of the tibia, at the point above described as being occupied by the yoke. After this, the screw was turned down, so as to make its point enter some little distance into the solid substance of the tibia, which retained the obnoxious fragment in its proper place without extension. The dressing was completed by inserting a few pieces of deal between the lateral splints and the strap, or belt, on the principle of the wedge.

The surgeon stated that he had been greatly troubled in the treatment of oblique fractures of the tibia and fibula, although he had tried all the heretofore known modes of practice; such as *extension* and *counter-extension*—*relaxation of muscles*—*position, elevation, and depression*—and pressure upon the displaced fragment; and that when he first thought of his new mode of treatment, he apprehended that it might be attended with inflammation of the skin, and for aught he knew, *necrosis* or *exostosis* around the pin. "But," he added, "no such thing has happened in a single instance."

I felt a deep interest in watching the result, of at least one case—so that I visited this patient once a week for three weeks. And in confirmation of what the surgeon had previously stated in regard to other cases, not the least inflammation existed even in the skin around the pin; and the limb was in good shape, and appeared to be fast uniting, which he (M. Maigne) said would be complete in 30 or 35 days.

The other new thing of which I propose to speak, is physiological; that which relates to the function of the pancreatic juice, in the progress of digestion. I believe there can be no doubt of its being new, since it was not known even to the private pupils of the discoverer, three weeks ago. For the following brief and intelligent description of this new physiological discovery, as well as for some instructive remarks on the result of some surgical cases, the operations for the cure or relief of which, I witnessed before I left Paris, I am indebted to my early friend and pupil, T. W. Powers, M. D., of New York, who is an industrious observer and close thinker; and to whom I am much indebted for many favors received from his hands during my short stay in Paris. I have neither asked nor received his permission thus to use the extract from his letter; nor do I believe it to have been written for the public eye—but the only apology I can offer for the liberty I have taken, is, that it may be the means of doing good.

"I have nothing of much interest to communicate in a professional way. The two cases of vesico-vaginal fistula, which you saw at Jobert's, are doing very well. One is perfectly successful. The case in which you saw Velpeau tie the carotid artery, died from suffocation about thirty hours after the operation. The autopsy showed a great and general dilation of the aorta, aneurism of the innominate, and enlargement of the right subclavian and carotid for an inch or two from their origin. The aneurismal sac projected from the posterior and inner part of the innominate, pressing directly upon the trachea. The sac was about as large as a small hen's or pullet's egg. Velpeau tied the spermatic vein, the other day, in a case of varico-

cele. Phlebits succeeded the next day, which was followed by purulent absorption, and death. About the same time he amputated the thigh of a man with white swelling of the knee, which terminated fatally; and he ascribed the result to the same cause, viz: purulent absorption.

"The physiologist about whom you inquire, is M. Bernard. He promises to become one of the first experimental physiologists of Europe. He has already highly distinguished himself by his experiments and researches in digestion, and in the circulating and nervous systems. His researches with respect to the pancreatic fluid, are quite recent, and establish, beyond all question, the exact use of that secretion. The following is the substance of what he has arrived at on this point. The pancreatic juice, when collected from a living animal (a dog for example,) by means of a fistula artificially established, has nearly identically the same physical character as the saliva, being limpid, colorless, slightly ropy, and rather heavier than water. It is constantly alkaline, and is coagulable by heat and strong acids, owing to the presence of albumen. The saliva is slightly alkaline when collected pure, but never coagulable by heat or acids. When the pancreatic juice is put in contact with azotized aliments, as fibrine, albumen, and gelatine, there is no effect produced. Putrefaction occurs in time, but no digestion. When applied to farinaceous substances, they are changed into sugar which is absorbable. Thus far there is nothing new—all this having been previously established. He, however, has shown—and the *merit* of this discovery is solely due to him—that when this fluid is put in contact with fatty substances of every nature, as oils, animal fats, butter &c., they are quickly digested or decomposed, and reduced to a state in which they may be absorbed into the circulation. This property is peculiar to the pancreatic juice, not being possessed by the saliva, gastric juice, bile, serum, nor any other fluid of the animal economy.

"The pancreas, therefore, now takes rank with the most important organs of the system. I have seen him repeat his experiments with this fluid, and they are quite conclusive. The first effect produced, when you put the pancreatic fluid in contact with oil, or any fatty substance, is to form an intimate emulsion, which will not separate on standing. If you agitate oil with saliva, gastric juice, serum, or *pure* bile, or any other animal fluid, the mixture separates when in repose. (Bile of animals mixes, or makes an emulsion, with grease, by virtue of the pancreatic fluid that is frequently mixed with it.) After the emulsion produced, the oil is decomposed into *glycerine* and a *fatty acid*, as the oleic acid, &c., which are absorbable, as well as the simple emulsion.

"He has also established another very important fact in regard to the digestive fluids—which is, that the union of the bile and the pancreatic fluid produces a new and distinct fluid, having, in addition to the peculiar properties of these two fluids, another superadded, viz: that of digesting azotized substances, or, in other words, the properties of the gastric juice. It therefore digests all alimentary substance, and is altogether the most important of the digestive fluids. This is found in the duodenum in man, below the orifice of the ductus communis choledochus, and in animals below the orifice of the pancreatic duct. By means of this fluid, which he calls the intestinal fluid, aliments which are not digested in the stomach, are acted upon in the intestines. The property that the pancreatic juice possesses of transforming starch into sugar, and which until now has been

considered its chief property, is a very subordinate one, and by no means peculiar, as almost all the other fluids of the economy possess it, viz: the saliva, serum of the blood, liquid of cysts, &c.

"All the effects produced by the pancreatic juice, as above described, are equally well seen by taking the pancreas of a freshly killed animal; as a chicken, dog, pig, &c., and bruising it, and pouring a little tepid water upon it. Let it stand, or agitate it a few minutes, and you have an artificial pancreatic fluid, with which you can perform all necessary experiments. If you kill the animal in a state of digestion, the fluid will be more active, as the pancreas is then in a state of greater activity. In the same way you can make artificial gastric juice, by taking the stomach of an animal. But the pancreas must be quite fresh, and the pancreatic fluid changes very quickly and loses its properties, whereas the gastric juice keeps indefinitely."

I am spending a few weeks in "the great metropolis," in sight seeing, with my family, and in visiting its numerous hospitals, and rich pathological museums. I am making, also, further additions to a valuable collection of pathological specimens, which I have procured in Paris for the Albany Medical College. I expect to visit Belgium, Holland, Germany and Switzerland, and if time permits, Scotland and Ireland. If my life be spared, I shall return to America in season to resume my duties in the College, at the commencement of the forthcoming lecture term.

I am very respectfully yours,

LONDON, May 22, 1848.

ALDEN MARCH.

Trial of a Physician for Assault and Battery.—The following singular case shows that the march of Improvement in New England, takes occasionally, an excentric direction. We copy from the Boston Medical and Surgical Journal.—Ed. BUFF. MED. JOUR.

"A trial of a novel character has lately taken place in New Hampshire, in which a very respectable physician was the defendant. Trials of medical men for *mal-practice*, have not been very uncommon, and have afforded opportunities for unprincipled individuals to attempt to obtain money from those who had used their time and best skill for the relief of the afflicted. The case alluded to is a new mode of harrassing the profession; and, it would seem, with not exactly the same object in view—as criminal punishment instead of pecuniary damages, was the penalty anticipated. The complaint was made by L. C. Delaware and his wife, of South Hampton, N. H., against Dr. J. B. Gale, of Salisbury Mills, Mass.—the charge against the latter being for an assault and battery upon Mrs. D. in March 1847, upon the occasion of her confinement with her first child. It would seem that this worthy couple, since the alleged assault more than a year ago, have, through the means of certain books which have been freely circulated, respecting the impropriety of employing male accoucheurs in midwifery cases, or by some other means, become convinced of the alleged gross indelicacy of such a practice, and for the purpose of showing their abhorrence of it, and to prevent as far as possible its repetition, the present complaint was made. How far they were justified, by the circumstances of the case, in adopting such a course, the evidence on the trial will show.

The following is the testimony of Mrs. D. herself, while that of Mrs. Woodman, an intelligent woman who was present, did not much differ from it.

"Dr. J. B. Gale, on the morning of the fifth of March, 1847, called to see me, agreeably to my request, which was conveyed to him by my husband. I was sick at that time, and expected to be delivered of a child. Dr. Gale came into my room about 5 o'clock and staid till 9, when I was delivered of a child, my first born. My mother and Mrs. Woodman were in the room when the doctor came, and remained there until the child was born. He had been in the room about fifteen minutes, when he came to where I was lying upon the bed, and after remarking—'Sister are you doing well,' he commenced making an assault upon me, by placing his hand upon my person. I had labour pains occasionally, and at intervals of a quarter and a half hour, he renewed his assaults by placing his hand upon my person. At these different times, I told the doctor to let me alone, but he did not. I also asked for my husband; but the doctor replied—'Umph! you do not need your husband.' The doctor did not ask my consent to make an examination. I think he increased my pains at each examination he made. I lay upon my left side—the doctor came up and made his examinations until my child was born, which was at 9 o'clock."

On the cross-examination, the evidence of Mrs. D. did not vary materially from that of the examination in chief—and was as follows:—

"While lying upon the bed, my person was not exposed, to my knowledge—the doctor remained at my side five or ten minutes at a time—he assisted at the birth of the child. I did not think it was right *that the doctor should handle me*—and told my husband so. This affair happened sixteen months since, and the reason I had not complained of the doctor before, was because *I wanted time to think of it!* The doctor visited me twice afterwards, and promised to call again but did not."

Several physicians were called for the defence, who testified that the conduct of Dr. G., as stated by these witnesses, was not different from the usual practice on such occasions. After the address of the counsel for the government, Justice Currier, before whom the case was tried, briefly reviewed the evidence, and after remarking that there appeared to be no cause for the complaint, that Dr. Gale, in doing his duty, had committed no offence whatever, ordered him to be discharged.

The friends of this species of reform will see that this mode of conducting it, is not likely to succeed, and we may therefore hardly expect a repetition of the attempt.

Pathology of the blood in Inebriates. By T. J. W. PRAY, M. D., of Boston.

SIR: I have been requested, by some of my medical friends in Boston, to collect the facts relating to the state of the blood taken from an inebriate in South Berwick, Me., and transmit them to your Journal.

It is well known to the members of the medical profession, that liquids, and even mineral and vegetable substances, taken into the stomach, are shortly found in different parts of the system. Madder, for instance, when internally administered, imparts a like color to the milk and urine, and to the bones of animals, without materially affecting the healthy action of any

tissue, or sensibly deranging the constituent parts of the solids or fluids, unless too long persevered in. Like results, varying according to the qualities of the fluids, are found, whenever any fluid is taken into the stomach capable of absorption. But there are very few known cases in which so much alcohol has been absorbed into the system as to change the chemical qualities of the blood, or so modify it, that its watery proportions should give place to the fluid which has been immoderately indulged in. The case which we shall now briefly refer to, plainly shows that such may be the fact.

A Mr. Thompson, aged 35 years, had long been subject to fits of intoxication, and was daily accustomed to the demands of a ruling passion. For five days previous to the examination of the blood, he had been in a beastly state of inebriation; and, indeed, it was found, upon inquiry, that he had drank, in that time, *two gallons* of "West India Rum." At the expiration of the fifth day, he went to Dr. J. C. Hanson, complaining of the usual symptoms of drunkenness, and wishing medical aid. Dr. H., seeing that he did not require any active medical treatment, but rather the *expectant* plan, concluded to deplete him a very little, for an experiment. The blood was forthwith drawn; and it was found destitute, in a measure, of its watery elements—alcohol having been substituted therefor. Immediately a lighted taper was applied to it, and it began to burn with a flame similar to that of alcohol. This produced such an effect upon the inebriate, that he refrained from his intemperate habits, and afterwards became a more sober man.

The fact, that the blood did burn, can be substantiated by the testimony of Drs. Jewett and Hanson, and other respectable citizens of South Berwick, who were eye-witnesses at the time the blood was drawn, and saw the experiment tried.—*Boston Med. and Surg. Journal*.

Dover, N. H., May 15, 1848.

Case of Prolonged Gestation in which the date of Conception was accurately ascertained. By R. H. McILVAIN, M. D., Charlotte, N. C.

The following case of gestation, prolonged to probably 296, certainly to 293 days, occurred under the personal observation of the writer. The parties are of unexceptionable character, and the statement of the husband that no intercourse was had after the night of the 4th of July, may be implicitly relied on.

Mrs. ———, whose character is above suspicion, was visited on the evening of July 1st, 1847, by her husband, whose business had compelled him to reside for more than a year before in a distant state. The husband remained till the morning of the 6th of July, and then departed, and did not return for more than nine months. On the nights of the 1st, 2nd, 3d, and 4th of July, there was sexual intercourse between the parties, but none on the night of the 5th or after. Shortly after Mrs. ——— considered herself pregnant, and on the 23d of April, 1848, was delivered, after an easy labor, of a fine healthy female child, weighing nine pounds.

Supposing impregnation to have occurred on the night of the first, as a consequence of the first coition, the duration of the pregnancy must have

been 296 days, but if we suppose the last copulation to be the one from which the pregnancy resulted, the period of gestation was 293 days.

This case is interesting, inasmuch as it furnishes conclusive evidence, that gestation may be prolonged to thirteen, if not sixteen days beyond the usual period.

The large size of the child—being a full pound and a half above the average weight of female children, is a circumstance in favor of its having been carried beyond the usual period.

The mother had borne three children previously, none of which weighed over eight pounds.—*Am. Jour. Med. Sciences.*

CHARLOTTE, N. C., May 25, 1848.

The Smart-weed as a Remedy for Mercurial Salivation and Aphthous Stomatitis. (Communicated in a Letter to the Editor of *Am. Jour. Med. Sciences.*) By R. WILCOX, M. D., of Elmira, New-York.

I have frequently, during the past year, prescribed a decoction of the leaves of the herb, well known by all in this country, and familiarly denominated, smart-weed, as a remedy in mercurial pytalism, and also in that form of aphthous stomatitis which occurs during lactation; and the degree of satisfaction I have felt while using it, has only been equalled by my surprise.

The possibility that this plant might possess remedial powers for salivation was suggested to my mind by the fact that farriers employed it with success to the cure of that disease of the salivary glands of the horse called slabbering; and being destitute so far as I then knew of any agent, which, if locally applied, would exert a decided curative effect, I resolved upon its trial the first opportunity. The opportunity soon presented itself. The remedy was used; and I was agreeably surprised when I saw every distressing and unpleasant symptom removed in twenty-four hours.

I have now employed it in about twenty cases of mild mercurial salivation, and have uniformly procured the same prompt and complete relief. I have tried its use in two of the severer forms, attended with numerous and deep ulcerations; these cases were made much more comfortable, but not cured. The benefit I derived from it in salivation induced me to make trial of it in the follicular stomatitis of nurses, which appears to be endemic to the valley of the Chemung River. (At least it is of much more frequent occurrence here, than at any location with which I am acquainted.) Within the last three months, I have prescribed its use in ten cases, and without an exception, they have been speedily and entirely relieved.

I am not prepared to state what can be accomplished with it in those cases of aphthous stomatitis connected with a tubercular state of the constitution, having yet had no such case; neither have I used it where the ulcerations were deep; in such cases, other remedies will doubtless be more effective. I suggest the remedy to my medical brethren for further trial, and if it shall prove in their hands to be worthy the commendation I have given it, I shall ever feel myself abundantly rewarded. The manner in which I have used it, is to take about an ounce of the dried leaves and tops; water, one pint; boil twenty minutes and strain. The mouth is washed with it every hour through the day.

ELMIRA, N. Y., May 8th, 1848.

Post Mortem appearances in a recent Dislocation of the Femur and Fracture of the Cranium. Reported by ERASMUS D. FENNER, M. D., of New Orleans.

As an opportunity to examine the state of the parts in so important a luxation as that of the femur, is of rare occurrence, the following statement may not be uninteresting to the profession. Luxations of the extremities never proving fatal of themselves, the surgeon may meet and contend with them through a long life, without being able to know precisely the nature and amount of injury that is done. This is particularly the case with the *hip joint*, which is so strongly knit, that it can only be displaced by extraordinary force; and when dislocated, can only be replaced by great surgical skill and adroitness. It is generally believed, that the chief difficulty consists in overcoming the spasmodic contraction of the powerful muscles which lie around the hip joint; whilst it has been barely surmised, that the *capsular ligament* itself might present no inconsiderable obstacle to the return of the head of the femur to its proper place, after sufficient extension had been made. Mr. Samuel Cooper, in his *Surgical Dictionary*, quotes as follows, from Mr. Pott:

"The mere bones composing the articulations, or the mere connecting ligaments, would, in general, afford very little opposition; and the replacing the dislocation, would require very little trouble or force, were it not, for the resistance of the muscles and tendons attached to, and connected with them: for, by examining the fresh joints of the human body, we shall find, that they not only are all moved by muscles and tendons, but also, that, although what are called the ligaments of the joints do really connect and hold them together in such manner as could not well be executed without them, yet in many instances they are, when stripped of all connexion, so very weak and lax, and so dilatable and distractile, that they do little more than connect the bones and retain the synovia; and that the strength as well as the motion of the joints depends in a great measure on the muscles and tendons connected with and passing over them; and this in some articulations which are designed for the greatest quantity, as well as for celerity of motion. Hence, it must follow, that as the figure, mobility, action and strength of the principal joints depend so much more on the muscles and tendons in connection with them, than on their mere ligaments, the former are the parts which require our first regard, those being the parts which will necessarily oppose us in our attempts for reduction, and whose resistance must be either eluded or overcome—terms of very different import, and which every practitioner ought to be well apprized of."

Mr. Cooper says: "That the muscles are the chief cause of resistance, is strongly evidenced by cases in which the dislocation is accompanied with injury of a vital organ; for then the bone may be reduced by a very slight force. Thus, in a man who had an injury of his jejunum, and dislocation of his hip, the bone was most easily replaced. (*Sir A. Cooper's Surgical Essays*, part 1, p. 20.) In short, anything which produces faintness or weakness, facilitates the reduction—as intoxication, nausea and sickness, paralysis, &c."

Again, "The supposition of the reduction being sometimes prevented by the capsular ligaments, Sir A. Cooper considers erroneous; he assures

us, that in dislocations from violence, those ligaments are always extensively lacerated; and that the idea of the neck of the bone being girt or confined by them, is altogether untrue."

Now let us see what we may learn from our case.

Case.—H. B., an athletic fireman on one of the tow-boats, (Porpoise) plying between this city and the mouth of the river, was blown up and terribly injured by the bursting of the boilers, on the morning of the 14th June, 1847. The boat was descending the river, having a ship and brig in tow. All the boilers burst at once, killing, wounding, and scalding a number of persons. The subject of our case was badly scalded and received a dreadful injury on the head. He was brought to the Charity Hospital on the 16th, and admitted into surgical ward No. 3, under the care of Dr. W. T. Brent. When he entered, he appeared to be laboring under a raving delirium, singing and talking incessantly. His condition was considered altogether hopeless, and scarcely anything was attempted to be done for him. He died on the night of the 17th, more than three days after the receipt of injury, and the autopsy was made on the morning of the 18th.

Post-mortem appearances.—*Head.*—There was found a fracture extending across the whole frontal portion of the head, involving the frontal, the temporal, the ethmoid, the malar, the superior maxillary, the nasal, and the sphenoid bones. The *crista galli* was broken off and driven through the dura mater, lacerating it considerably. There was considerable depression of the bones across the orbitar region, and the brain was badly lacerated and bruised. The integuments at this point were *not cut or lacerated* but scalded and swollen. He was in the act of putting a stick of wood into the fire when the boiler burst, and drove it forcibly against his head. It is worthy of remark, that the brain, where the phrenologists have located the organs of *language and tune*, suffered the greatest injury in this case, and that the man was *talking and singing* as long as he was able. The examination of the brain was not carried any farther, as our special attention was invited to the dislocated hip. As before remarked, no effort had been made to reduce the dislocation, the case being considered utterly hopeless.

State of the dislocated Thigh.—The luxation was upwards on the *dorsum ilii* of the left side; the limb was shortened about an inch and a half, and the toes were turned inwards. On raising the integuments, extensive ecchymosis was discovered around the joint, along the fascia superficialis, and amongst the muscles as low as the knee. On raising the *gluteus magnus* and *medius*, the naked head of the femur was exposed, lying on the dorsum of the ilium, with the *ligamentum teres* hanging to it. This ligament had been completely detached from the acetabulum, and nearly half of its attachment to the head of the femur was broken up. The head of the femur, in being forced upwards and outwards, had ruptured and lacerated a portion of the *obturator externus*, *pyriformis*, and *geminus* muscles. After all the external muscles about the joint had been dissected up, we could not bring down the thigh. The *iliacus* and *psaos magnus* were now severed. These let the head down somewhat, but it could not be replaced. The *triceps adductor* was now divided, but without effect. The *ileo-femoral* ligament was found tensely stretched. All the muscles between the pelvis and thigh being now severed, there was of course no

obstacle to complete extension; yet it was found impossible to replace the head of the femur into its proper position. It could not be forced back through the aperture in the capsular ligament out of which it had passed. The capsular ligament was found ruptured at least one-half of its extent, yet the opening had to be enlarged from one-half to three-quarters of an inch, before the head of the femur could be put back into the cotyloid cavity. So, here evidently laid the chief obstacle to the reduction of the dislocation.

The capsular is a very strong fibrous ligament, and we may readily conceive of its possessing sufficient elasticity to allow the smooth round head of the femur to pass out through a lacerated opening, which might at once contract so as to offer considerable resistance to its return.

In Sir Astley Cooper's Essays on Dislocations and Fractures of the joints, may be found a case and examination similar to this, in which the man died twenty-four hours after the receipt of injury, but the dislocation was reduced before death. With due deference to the high authority of Sir Astley Cooper, I cannot help supposing the capsular ligament may often cause much of the difficulty in reducing dislocations of the hip joint.—*New Orleans Journal*.

Simple mode of preventing Bed-sores.—The following ingenious method of preventing those dreadful specimens of disease or neglect sometimes presented in even our best regulated institutions, is suggested by Dr. Purefoy, in a former number of the *Dublin Medical Press*. The doctor may be allowed to describe his practice in his own words:

"Having lately to treat a case of compound fracture of the tibia in an old man, the leg was comfortably placed upon the double inclined plane, and the case went on very favorably for some days, when it was thought that the leg must be placed upon the side, in order to relieve intolerable pain of the heel, and to obviate sloughing of the integuments. In this dilemma it occurred to me to try to support the heel upon a bladder partially inflated, since pads failed completely in affording the desired relief. An ox-bladder, previously moistened in tepid water, and afterwards oiled, was placed under the heel in a flaccid state, and subsequently filled gently with air, so as to give the heel the necessary elevation, and promote, as far as might be, the comfort of the patient. The experiment was successful beyond my most sanguine hope, as the air flowed underneath and upwards by the sides of the foot and ankle, thus affording an unusually agreeable and secure support to the foot and instep, at the same time relieving the heel from undue pressure: The old man exclaimed in rapture, 'O, sir, I'm in heaven!' Suffice it to say, that by renewing the bladder once only, the cure was perfected so far at the end of a month, that the patient could leave his bed, and during this time he was completely relieved from the intolerable pain which at first was so very troublesome. I have lately prevented the occurrence of bed-sores by the aid of a bladder placed under the buttocks, and rolled up in a soft napkin, having previously been partially filled with air, although the patient had been for nearly two months lying upon his back, suffering under extensive gangrene, as the result of extravasation of urine."—*London Lancet*.

On the Medicinal Effects of the Persequintrate of Iron.—Dr. Graves states* that he has lately used the persequintrate of iron with very considerable success. He proceeds to say, that “you will be consulted by females of a delicate and weakly habit, who frequently exhibit symptoms of nervous derangement, such as palpitations, sleeplessness, and headache, who are easily excited or alarmed, have a tendency to emaciation and paleness, and have little or no appetite. Combined with these general symptoms you find that they have been laboring under diarrhoea for weeks, and even for months, and that this with other causes of debility has rendered their condition extremely uncomfortable. You will also be informed by the patient, that she has tried many remedies without benefit, and that she is extremely anxious to have something done to give relief; and hence it is a matter of importance to be acquainted with any remedy which may be likely to prove serviceable. This form of diarrhoea is of an unmanageable character, and very seldom amenable to the ordinary modes of treatment. The common astringent remedies totally fail; chalk-mixture, kino, rhatany root, and catechu are useless, and in such cases it has been observed, that opium is generally injurious. If you prescribe opium it certainly checks the disease for a time; but this temporary relief is accompanied by debility, malaise, restlessness, and many uneasy symptoms, and the diarrhoea soon returns and is as bad as ever. The medicine which I have found most effectual in such cases is the persequintrate of iron. With it I have succeeded in curing many cases which had been exceedingly obstinate, and of very considerable duration, the disease having, in one instance, resisted all the efforts of medical skill for seven months, and in the other for two years. Seven or eight drops of the liq. ferri persequintratis, increased gradually to twelve or fifteen in the course of the day, was the quantity prescribed in both cases. In the course of four days a slight diminution of the diarrhoea was perceived, in a fortnight the patient felt much better, and in a month or five weeks it had disappeared altogether. This took place without being followed by any bad effects; there was no swelling of the stomach, no tympanitis, no tormina, no restlessness or nervous derangement; the patients recovered their health and strength, and the cure was at once, safe and permanent.”

Cases have occurred to myself where the disease has existed many years, yet were perfectly cured in a surprisingly short time from the use of the persequintrate of iron. A great deal of ill health frequently proceeds from chronic diarrhoea. Epilepsy and hysteria, for instance, often exist together, with a long continued relaxed state of the bowels, and do not yield till the remedy is obtained for the diarrhoea. I have seen these and other diseases cured chiefly in consequence of the persequintrate of iron checking the accompanying diarrhoea.

Dr. Neligan says, that “the persequintrate of iron is an admirable astringent, possessing also tonic properties. It will be found particularly useful in chronic cases of mucus diarrhoea, when there is much emaciation and loss of appetite. In such cases, I have derived much benefit from its employment after many other remedies have failed.”†

*System of Clinical Medicine, 1843.

†Medicines; their Uses and Modes of Administration, 1847.

In some cases where the ordinary doses (fifteen to thirty drops) thrice a day aggravated the diarrhoea, I have succeeded by giving for some time smaller doses, such as five drops twice or thrice a day, gradually increasing the dose as the patient was able to bear it. In a few cases of the same kind, persesquinitrate has been given in a very large doses by enema. I have already said, that it is generally inapplicable in phthisis. In my paper in the *Edinburgh Medical Journal*, there is a striking instance of a lady in the last stage of phthisis having diarrhoea stopped by enemata containing this medicine. Intestinal ulcerations, if they existed, were probably beyond the reach of the enemata. Mr. Tindal, of Glasgow, informs me of a case of phthisis, where, after the failure of many remedies, the diarrhoea uniformly ceased on the patient using the persesquinitrate of iron. These however, are exceptions, and the rule is, as I have stated.

I have seldom employed the persesquinitrate of iron in recent attacks of diarrhoea, chiefly because these cases are readily controlled by other medicines. When used in such cases, it succeeded best in large doses, such as half an ounce or an ounce given by enema. With the exception of a few cases of children, its administration in cholera in my hands was a failure. As one cause of this possibly arose from its speedy rejection by vomiting or purging, it has occurred to me, since the departure of cholera from this country, that benefit might perhaps be derived from injecting it, largely diluted with water, into the veins, in the same manner as saline injections.

I have lately given the persesquinitrate of iron internally, with much benefit, in several cases of urticaria. A lady, twenty years of age, who had been afflicted with it since her childhood, and had tried various remedies, without success, was cured by the ordinary doses in less than a month. She is now able to take any article of food, though before using the persesquinitrate she required to be very cautious, and even with the utmost care was seldom a day free from the eruption, and accompanying uneasiness at the stomach.

A lady twenty-one years of age, had an itchy eruption on the face and hands for at least twenty years. When I saw her these parts were swollen, tender looking, and readily exuded a watery lymph. The disease was generally aggravated after dinner, more especially if the dinner was tempting; at this period of the day she retired to her own room, conscious that her appearance was repulsive even to her nearest relatives. It is easy to conceive the unhappiness to which this must have given rise; and though medical men, both in Glasgow and Edinburgh, were consulted at different periods, no plan of treatment was of any avail. After commencing the persesquinitrate of iron, an amendment was soon perceptible; the swelling of the face and hands began to abate, the skin became less tender and less affected by meals, and in the course of some months, a cure was gradually accomplished. General bodily uneasiness was of daily occurrence, and aggravated very considerably the depressing effect of the complaint; no symptom was more immediately under the control of the persesquinitrate, which always made her in a short time more comfortable. I believe that the cure of cutaneous diseases by this medicine is chiefly attributable to its efficacy in improving digestion.

For external ulceration I have used the persesquinitrate of iron internally in a few cases, and apparently with benefit. Mr. Tindal writes me, that he gave it in a case of ulcer of the leg of eleven years duration, and effected a cure as he believes owing to its use. If these observations are

correct, they do not contradict the experience respecting the aggravation of diarrhœa where ulceration of the mucous membrane of the intestine exists; because in one case the persesquinitrate does not touch the ulcer, in the other it does.

I have made some trials in scarlatina, with a view to prevent or mitigate ulceration of the fauces, but hitherto without any decided result.

In hiccough it is often a very potent remedy, and great benefit has been derived from it in tic douloureux.

Dr. Neligan mentions that Dr. Montgomery has used it very extensively in mucous discharges from the vagina, and in such cases considers it the best of the ferruginous preparations.

My friend Dr. Paton, of Paisly, who has had great experience with this medicine for many years, tells me that he has found it very useful in profuse mercurial salivation, both as a lotion and taken internally.

Chronic diarrhœa, however is the disease in which the persesquinitrate of iron has been longest and most extensively used. All my medical friends who have prescribed it, concur in saying, that it is very efficacious, and that many cases which had resisted all other treatment have been cured by it.

In making the solution of the persesquinitrate of iron, I now employ the following formula, which differs in a few respects from the original in the Edinburgh Medical and Surgical Journal.

Take of Iron Wire, (that sold under the name of No. 17) one ounce. .

Nitric acid, three ounces by measure.

Water, fifty-seven ounces.

Muriatic acid, one drachm.

Mix the nitric acid with fifteen ounces of water, (in very warm weather the quantity of water may be somewhat greater, and in cold weather somewhat less) in an earthen vessel capable of holding three or four times this quantity. Put into this diluted acid the iron wire broken into a number of pieces, and so twisted as to extend into every portion of the liquid. Cover the vessel lightly and set it aside. In eight or twelve hours the process is completed, when the solution is to be poured off the undissolved wire, and the remainder of the water together with the muriatic acid, added, to make up the whole sixty ounces, (thirty in the original formula.)

In this process there must be a slight excess of wire (say thirty grains) to ensure the combination of the whole of the acid. A great excess, if allowed to remain long in the liquid, would convert it into protonitrate. When properly prepared, the solution of the persesquinitrate of iron has a dark red color, like that of dark brandy; and the carbonate of soda produces a red precipitate, unmixed with any tinge of green. The taste is very astringent. The large quantity of water, and the free muriatic acid, are for the purpose of keeping the solution long transparent. In cold weather two or three months will elapse before it becomes muddy.—*Monthly Jour. of Medical Science.*

Kreosote in Erysipelas. By P. FAHNESTOCK, M. D., of Pittsburgh. (Extracted from a letter to the Editor of the Am. Jour. Med. Science.)

Allow me to state that during a practice of many years, I have been in the habit of using kreosote in erysipelas of the face, (as well as on all other parts of the body,) in both its simple and phlegmonous forms, con-

fining my local treatment to this article alone. And such has been the success of this treatment, that I have as yet to witness a case which has not yielded to it.

In every case of local erysipelas I immediately apply the purest kreosote, with a camel's hair brush, over the whole of the affected surface, extending it some distance beyond the inflamed part, and at the same time administering a dose of chlor. hydrarg. followed by a sufficient portion of jalap to insure free catharsis. This, in the majority of cases, is all I find necessary. But when the mucous membrane of the mouth and fauces is also affected, I pencil those parts with a strong solution of the nit. argent., say from 3ss to 3i, to 3i of distilled water.

In the phlegmonous form it will be found necessary to repeat the application more frequently than in the simple, with the addition of a bread and water poultice, applied nearly cold and well sprinkled with water strongly impregnated with the kreosote, or a cloth, kept constantly wet with the solution, especially for the face.

The kreosote when applied, should cause the parts to become white immediately. If this does not occur, it is not pure. Thus you will perceive that success depends upon having the best quality of oil. It is worthy of remark that the skin does not become in the least marked by the application, no matter how often it is applied.

I was first induced to make a trial of this remedy, by a remark made by Dupuytren in a small pamphlet which fell into my hands, in which he supposed it might be a good remedy in this disease.

The result of an extensive and exclusive use of this article in erysipelas, has induced me to place the most implicit confidence in it; and all I ask of the profession is a fair trial for it, confident that whoever once tries it, will abandon all other articles in its favor.

Surgery at a Discount.—The following case came before one of the city magistrates a few days since. The son of a man whose income is say \$25,000 a year, received a wound about three-fourths of an inch long on the upper lip. The wound extended obliquely upwards and backwards from the free border of the lip, which was entirely divided for the space of a quarter of an inch. A young physician brought the edges together by means of the twisted suture, and adhesion took place immediately. The reparation is almost perfect, scarcely a mark being left in the line of the wound. After the lapse of a proper time, a bill of *ten dollars* was sent to the boy's father, payment was refused; and suit was brought to enforce payment. One of the editors of this Journal swore (and does yet for that matter) that the service was well worth ten dollars; another physician swore that it was worth just three dollars; and a student of medicine (!) swore that it was worth just three dollars. The doctor's testimony being as 1½ to 1, the court decided that the cure of accidental hare-lip is worth just three dollars! The plaintiff, not satisfied with the judgment, took an appeal. He says he wants the value of such a piece of surgery fixed and settled undubitably; wants it placed on record, so that in future there may be no litigation. We shall give notice of the result.—*Louisville Western Med. Journal.*

EDITORIAL DEPARTMENT.

BIBLIOGRAPHICAL NOTICES.

On the Theory and Practice of Midwifery. By FLEETWOOD CHURCHILL, M. D., M. R. I. A., etc., with notes and additions, by Robert M. Huston, M. D., Professor of Materia Medica and General Therapeutics, and formerly of Obstetrics, and the Diseases of Women and Children in the Jefferson Medical College of Philadelphia, etc., etc. Third American Edition, Revised and improved by the author. With one hundred and twenty-eight illustrations from drawings by Bogg and others. Engraved by Gilbert. Philadelphia: Lee and Blanchard. 1848. 8vo. pp. 525.

The first American edition of this work was published in 1843. In 1845 a second edition was called for. The latter having been exhausted, a third edition is now issued, to meet an increasing demand for the work. These facts speak for the excellence of the work, far better than any commendations from the pen of the Journalist. It suffices to chronicle a new edition, which, we learn from the preface, has undergone a careful revision by both author and editor, new matter also being added to present to the reader the new facts and observations of interest and importance that have transpired since the last edition was issued.

On the Blood and Urine. By JOHN WILLIAM GRIFFITH, M. D., F. L. S., &c., G. OWEN REES, M. D., F. R. S., F. G. S., &c., and ALFRED MARKWICK, M. D., &c. In one volume; Philadelphia, Lea & Blanchard, 1848. 12 mo.

This volume embraces three distinct works, which were published in London separately. The subjects treated, being closely connected, and each of the works being too small to make a book of much size, the American publishers, very judiciously, as we think, have embodied them in a single volume, the individuality of each work, however, being preserved.

The work by Dr. Griffith is entitled "A practical manual, containing a description of the general, chemical, and microscopical characters of the Blood, and secretions of the human body, as well as their components, including both their healthy and diseased states; with the best methods of separating and estimating their ingredients; also, a succinct account of the various concretions occasionally found in the body, and forming calculi."

This work occupies 182 pages.

The title-page of the work by Dr. Rees, reads thus:—"On the analysis of the Blood and Urine, in health and disease; and on the treatment of urinary diseases." This work embraces 165 pages.

Dr. Markwick's treatise is "A guide to the examination of the urine in health and disease, for the use of students." 118 pages.

Students and Practitioners who would not be laggard in following the march of practical Medicine, must not neglect the subjects treated of in these three *brochures*

A Dispensatory and Therapeutical Remembrancer; comprising the entire lists of *Materia Medica*, preparations and compounds, with a full and distinct version of every Practical Formula, as authorized by the London, Edinburgh and Dublin Royal College of physicians, in the latest editions of their several *Pharmacopœias*; to which are subjoined *copious relative tables*, exemplifying approved forms under which compatible medicines, &c., may be extemporaneously combined, &c., &c., &c. By John Mayne, M. D., L. R. C. S., Edinburgh. Revised, with the addition of the Formulæ of the *United States Pharmacopœias*, etc. By R. EGLESFIELD GRIFFITH, M. D., author of "Medical Botany," etc., etc. Philadelphia: Lea and Blanchard. 1888. 12mo. pp. 329.

The title page of this work, which, it will be perceived, is unusually copious, sufficiently explains its character and scope. It is truly a *multum in parvo*, and must be a convenient volume for reference.

A Practical Treatise on the Diseases of Children. By J. FORSYTH MEIGS, M. D., Lecturer on the Diseases of Children, in the Philadelphia Medical Association, &c. Philadelphia: Lindsay & Blackiston. 1848. 8vo. pp. 575.

This volume is No. 3, of the *Medical Practitioners' and Students' Library*, the two first volumes of the series having been already noticed in our pages. We have given the greater part of the work a careful perusal, and, in our opinion, it is a production in every way creditable to the Author. Were we disposed to be critical, we might comment on the very constant reference to the author's experience, which, if we mistake not, has extended over a less number of years than that of some other authors of practical treatises on the diseases of children. We do not intend by this remark to sneer at the crime of being a young man; we would only intimate that the manner in which the author speaks of his own experience, may, possibly, convey an erroneous impression, appearing to imply the possession of some gray hairs. That the author has prosecuted personal observation in a careful, philosophical manner, and turned his opportunities to the best account,

the work bears evidence. His arrangement of topics, and the practical conclusions at which he arrives, appear to us to be sound and judicious. Moreover the work embodies, in a small compass, the most valuable precepts of the most approved modern authorities, on the subjects of which it treats. In short, it is a clearly written book, of which the author need not be ashamed hereafter, even if he achieve still more creditable bibliographical efforts.

It is published to correspond with the numbers of the same series already issued, and may be sent by mail, the price being \$1 25.

The project of the *Library*, and the "getting up" of the works are creditable to the enterprising publishers, Messrs. Lindsay & Blakiston.

A Case of Typhus or Ship Fever, with remarks. By WM. INGALLS, M. D., Fellow of the Massachusetts, Rhode Island and New Hampshire Medical Societies; formerly Professor of Anatomy, Surgery, and Physiology in Brown University.

Our organ of reverence leads us to shrink from any apparent want of respectful consideration for one, whose advanced age, and former position as a practitioner, are well known to us. We therefore leave this little pamphlet without criticism.

Trial for Malpractice. Tins vs. White. Case of Fractured Femur.

This suit was instituted nearly five years ago, the plaintiff charging the defendant with inattention and unskillfulness in the management of the case, in consequence of which the femur was deformed, and the usefulness of the limb impaired. It was tried three times, the jury on the two first trials not being able to agree upon a verdict. On the last trial, the jury returned instantly a verdict for the defendant.

A pretty full report of the trial has been furnished us, and although it occupies considerable space, we think it deserves to be published, and perused, for several reasons. This is, in the first place, due to the parties concerned. The fact alone of being sued for malpractice, is apt to convey an imputation upon the professional character of the defendant, which is only to be removed by giving publicity to all the facts which the trial discloses. By reference to these facts also, the reader is able to form an opinion as to the motives which have actuated the plaintiff, in endeavoring to recover, at law, damages for supposed grievances.

The trial is interesting in a scientific point of view. The question at issue, as to the cause of the shortening and deformity in the case, involves practical considerations of importance to the surgeon. It is interesting also from the fact that it embraces the testimony of several eminent practitioners, not only as respects the facts of this particular case, but concerning the treatment, etc., of fractures generally. The reader will observe that among the medical witnesses examined at the three trials, were four well-known teachers of Surgery.

And as a contribution to the annals of trials for mal-practice, it possesses value. It is certainly a significant commentary on suits of this character, that this suit, which had dragged its slow length along for the space of five years, was at length decided by the jury on the first balloting. The commentary is rendered still more significant by the following particulars, which it may not be improper to mention, in this connection:—At the first trial, it was generally understood, a majority of the jury were in favor of a verdict for the plaintiff. At the second trial, a *struck jury* was obtained; i. e. forty-eight intelligent persons were selected by the County clerk; of these, each party had the privilege of striking off the names of twelve, and of the remaining twenty-four, the names of twelve were drawn by ballot. A jury obtained in this way, is presumed to embrace more intelligence than juries procured in the ordinary mode. Nevertheless, at the second trial, the struck jury failed to agree. At the third trial, as already remarked, a verdict was returned for the defendant without any consultation, the jury being out only long enough to express their unanimity by balloting. The facts disclosed by each of the trials, were, in all material respects, the same, and by perusing the report, the medical reader will be able to form an opinion as to their character. Whatever this opinion may be, the history of the suit illustrates the glorious uncertainty of the law in cases of this description. Should it appear, from an examination of the testimony, that the plaintiff had no just ground for complaint, the reader cannot fail to arrive at the conclusion that it is not always an easy matter for the defendant, under such circumstances, to achieve justice; and that suits for mal-practice cannot be considered matters of trifling moment, as regards loss of time and money, and mental inquietude, notwithstanding the defendant comes off in the end triumphant.

Veracity of Homœopathsists.—It is a common remark, that “figures cannot lie.” This remark, however, was never intended to cover the veracity of those by whom the figures are made. Lying by means of figures is

as feasible as it is common with those, who, to promote their own base purposes, are ready to avail themselves of any method of deception which promises success; and no sophistry is so well calculated to deceive as false statistics. Most of our readers, probably, are aware, that in an article by Dr. Forbes, in one of the expiring numbers of the late *British and Foreign Medical Review*, (an article which impaired not a little the respect of the profession for the good sense of the author,) the reports of Dr. Fleishmann, of the results of homœopathic treatment, at the hospital in Vienna, were cited as exhibiting a fair test of this method of practice. It turns out, as we learn by the *London Lancet*, that these statistical statements, were arrant forgeries. An examination of the books of the establishment has led to their detection. How far the records themselves are false, of course cannot so well be ascertained. They were made at a homœopathic establishment, under the direction of one who is dishonest enough to give a false representation of the results of their analysis; hence, it is fair to presume, that if the matter could be sifted to the bottom, it would be found that the case is still worse for homœopathy than it even now is proved to be.

A somewhat similar trick has lately been attempted in the city of New-York. The trustees of the "Homœopathic Dispensary Association" published a card, addressed to the public, setting forth, in figures, the results of homœopathy at an orphan institution, as contrasted with results, at the same institution, while the sick received regular medical attendance. Dr. James McCune Smith, of New-York, was induced to investigate the matter, and he proves from the same source whence the figures appearing on the card were taken, that, so far from figures establishing the superior success of Homœopathy, the odds are more than double against it. We refer those who have any curiosity to examine the matter, to our respected contemporary, the *Annalist*, (No. 18, vol. 11,) which contains the card, and the article by Dr. Smith, together with some excellent remarks by the editor. That the Trustees who have lent their names on the card are guilty of a deliberate intention to deceive the public, may not be true, but it was certainly their duty to ascertain that there could be no room for doubt as to the correctness of the statistics, before consenting to endorse them.

It is not surprising that they who have enrolled themselves as Homœopaths with a view to making the most of it as a pecuniary speculation upon public credulity, should resort to these, and other equally dishonest means of furthering their ends. Not less would be expected from the character of their motives; it is carrying out the spirit which, as Dr. Lee has abundantly showed, actuated the founder of the imposition. Many of them

have succeeded in their objects, and are now ready to laugh at the folly which has filled their pockets.

The latter consolation will not remain for those who have been duped. We really cannot but commiserate the few unfortunate gentlemen, and more particularly, the not so few philanthropic ladies, who have felt it to be their duty to go from house to house, endeavoring to persuade invalids to dismiss their medical advisers, and try a homœopathist. This zeal, which thus prompts them to overstep the bounds of delicacy, and we might add, decency, is pretty good evidence that they do not feel quite secure in their confidence in the merits of their cause. It savours of the plan pursued by the fox, in the fable, who had lost his caudal appendage. Mortification, more than any other species of misery, likes company. But this subject is too grave for ridicule. If it concerned merely mortified pride, or the loss of a few dollars, it would be quite a different matter from what it really is. It is a subject involving health and life. If persons in the independent exercise of their judgment, elect a course calculated to jeopardize these most valued of all temporal blessings, they may be compassionated, but perhaps are not culpable. It is otherwise with those who officiously obtrude upon the sick or their friends, and taking advantage of the anxiety and weakness which are incident to disease, succeed in diverting, or, at least, impairing the resources of medical art. We envy not the moral perceptions which do not recognize the fearful responsibility which such conduct involves; nor the conscience which is insensible to the reproaches (albeit unuttered) which are breathed in the unavailing regrets of those who mourn for departed friends.

Proceedings at the Annual Convention of the Connecticut Medical Society, May, 1848, etc.

We are indebted to the politeness of Dr. Gordon W. Russell, secretary of the Connecticut Medical Society, for a copy of the proceedings at their last annual convention. The reader of this publication cannot fail to entertain sentiments of great respect for the intelligence and spirit which appear to pervade the Medical Profession of Connecticut. In connection with the proceedings, is published an address by B. Fordyce Baker, M. D., on *Diseases of the Cervix Uteri*, which we have read with pleasure and profit. We had marked the address for copious quotations, but have concluded not to insert them, as the subject has been considered pretty fully in a former number of this Journal (see analytical Review of Bennett on

diseases of uterus, vol. 11 page 575) Dr. Baker's observations go to confirm the views contained in the article just referred to, and illustrate the importance of the speculum vaginae, in determining the true morbid conditions of the cervix, and in applying remedies directly to the diseased parts. We commend Dr. Baker's address to the careful perusal of the practitioner.

On the Method of Preparing Collodion. By C. GREEN, M. D., Homer, N. Y.

The following article by Dr. Green, was received too late for insertion in the department of original communications. As the method of preparing the collodion (which, strangely enough, was not announced by either of the competitors for the honor of the discovery) has not been communicated to our readers, and as some of them may desire to prepare it for themselves, we introduce the article here, rather than defer it for our next No. Dr. G. will please accept our thanks for his valuable contributions.—EDITOR.

I am induced to offer for publication, some remarks on the subject mentioned above, from the consideration that, so far as I have been able to ascertain, no very definite account of the process has been made known to the medical public. A formula for preparing the cotton appeared in the Boston Medical and Surgical Journal, but it was very incomplete. In answer to some queries on the subject by a correspondent of that journal, the editor, in the No. for July 19, extracts a formula, with some remarks, from the American Journal of Pharmacy. It appears from those extracts, that the ordinary commercial gun-cotton is *not* soluble in ether. The following is the formula which has been found best to succeed in the preparation of collodion, by the authors of those extracts:—Take of Nitric Acid sp. gr. 1.452; Sulphuric Acid (commercial) each 1 fluid ounce; cleaned and bleached cotton 2 drachms. Thoroughly saturate the cotton with the acids, and macerate for twelve hours. Then wash the cotton, dry it rapidly by artificial heat, in the shade, and dissolve it in one and a half pints of sulphuric ether." The authors of this process (Dr. Parrish and Livermore) remark, that gun cotton, as thus prepared will lose its solubility after being kept a few days, or particularly by being exposed to the rays of the sun; but that which I have prepared, in the manner I am about to relate, is perfectly soluble after being kept several days, and even several weeks. I have found, also, that it is more perfectly soluble when completely and rapidly dried in strong sun light, than when more slowly dried in the shade, by ordinary evaporation. For the proportions of the acid which I

use, I am indebted to the Boston Medical and Surgical Journal. The following is my formula:—Take of pure nitric acid of the shop, f. ʒiij; commercial sulphuric acid, f. ʒiiij. mix and *allow them to cool*; pure cotton (the “drawn cotton” of the factories is the best) 15 grs.; press the cotton into the acids, and see that it is thoroughly saturated with the acids; macerate *thirty minutes*. Then wash the cotton in a glass vessel thoroughly, by means of agitation in repeated waters, and by squeezing, until you can perceive by the taste no remains of acid. Care should be taken not to divide the mass of cotton into many parts, as it will then be more difficult to pick it open equally, and thus fit it for equal and rapid drying, and perfect solubility. After picking the cotton into a light flocculent mass, I spread it thinly on a sheet of paper, and expose it to the direct rays of the sun. I suppose that drying by artificial heat would answer the same purpose, but, as yet, I have not tried it. This quantity of cotton may be put into three or four fluid ounces of sulphuric ether, according to the consistence of which you may desire the fluid to be, it being rendered more thin by the addition of ether. The above quantity of cotton with f. ʒiv. will make a solution a little thinner than recently strained honey, and nearly as transparent. It has somewhat the appearance of a thick mucilage of gum arabic. This when dried in thin layers is transparent, and in fact, for some purposes, serves as an excellent varnish. I have observed, that, on standing, the more opaque portion of the solution subsides, and leaves a perfectly transparent stratum on the surface, which, though perfectly adhesive, does not dry as rapidly as the thicker and more opaque portion. It may be shaken before being used.

The *quality* of the gun cotton, and of the solution, will depend much upon the carefulness of the manipulation in the process of preparation. In the first place, if the whole mass of cotton is not perfectly saturated with the acids, a portion, when washed and dried, will not be soluble. In the next place, in the process of maceration and washing, it should be retained in one mass, and not twisted, so that it can be easily separated into flocculae which will favor rapid and perfect drying. It should be entirely freed from acid by agitation in soft-water. The cotton thus prepared will have its natural color, or may be changed to a light yellow, and the color of the solution will be accordingly white or yellow.

In applying it surgically to wounds, the straps should be saturated with it, the edges of the wound held together, and the straps closely applied to the skin until it dries. An additional coating of the collodion may be applied over the straps and around its edges, which will serve to strengthen

it. I have used the thin solution with admirable success, as a coating for superficial burns. I should apprehend that it might be of service when applied around the edges of *atonic* ulcers, as it would corrugate the skin, and thereby give support, operating on the principles of Bayton's plan of strapping, or straps saturated with the solution may be used.

In one case of dislocation of the lower end of the ulna from the radius backwards, to which I was called on the 18th day after the accident, and in which I wished to make gentle and continued pressure with a bandage around the lower extremity of the cubital bones, I applied a strap an inch in width, saturated with this solution, and it answered my purpose completely. I was able to make cold application without fear of loosing the strap, or of changing its tenseness. Water dressings with the collodion can be freely used. It will be found a most valuable adjunct in the various departments of surgical practice.

I should have mentioned that before I learned from any source the proportions of the acids to be used, I made a successful experiment by combining sulphuric acid $\frac{3}{4}$ v., nitric acid, $\frac{3}{4}$ iii. in which I macerated the cotton and washed as above. It was perfectly soluble. But I have used the Boston proportion, and it is equally good. I should remark, that the cotton thus prepared is not exactly gun cotton. It does not possess its explosive properties.

Introductory Addresses.—Since our former notice of Introductory Addresses in the last volume of this Journal, a few additions to our list have been received—to wit:—*Address delivered at the Castleton Medical College by Joseph Perkins, M. D., Prof. of Mat. Medica and Obstetrics.* Prof. Perkins may be ranked among the class of veteran teachers, and the character of this address is what would be expected from a writer of his ability and experience.

Address delivered at the Castleton Medical College by Wm. Sweetser, M. D., Prof. of the Theory and Practice of Medicine.

Valedictory Address by Henry Gibbons, M. D., Prof. Institutes and Practice of Medicine, at the Philadelphia College of Medicine.

We tender our thanks to the authors for remembering us, and shall always be happy to receive similar favors. We should do them the justice to give our readers extracts, were it not that we had considered the last year's crop disposed of, and the next harvest of introductions is so nigh at hand.

Belladonna, Mislabeled Extract of Dandelion.—In our last number we gave an account of a case of poisoning by Belladonna purchased for the Extract of Dandelion. We have since learned that, several months ago, a similar accident occurred in the same way, another Druggist of this city having received from the Shakers a considerable quantity of the Extract of Belladonna purporting to be Dandelion. Since the publication of our last number, still another mistake has been made of the same description. The druggist who supplied the medicine which gave rise to the accident several months ago, informed us that he immediately reported the circumstance to the Mt. Lebanon Society, and was informed in reply that the Society were aware that a large quantity of the Belladonna had been incorrectly labeled, and sent over the United States. There seems to have been culpable negligence, not only in the wrong labeling, but in observing silence on the subject, after the mistake was known by those who had committed it. No efforts appear to have been made to apprise druggists, and the public, of the fact that they had sent abroad a large quantity of Belladonna labeled Dandelion. Is there no legal punishment for such abominable selfishness, and reckless disregard for human life? If not, there is a hiatus in the criminal law which should be filled as soon as possible. In the meantime, we hope the matter will be so extensively made known, that an effectual *quies* will be put upon any future sales of medicines prepared by the Shakers of Mt. Lebanon, N. Y. The reader of the case reported in our last number, will have observed, that, in addition to the carelessness in confounding the two articles, the Belladonna Extract was a miserable preparation. Had it been a good article, the patient's life would probably have been sacrificed to the mistake.

Present to Dr. Morton.—A silver box, containing one thousand dollars, has been presented to Dr. Morton, with the following inscription:—"This box, containing \$1000, is presented to Wm. Thos. Green Morton, by the members of the Board of Trustees of the Mass. Gen. Hospital, and other citizens of Boston, May 3d, 1848. He has become poor in a cause in which he has made the world his debtor. Testimonial in honor of the ether discovery of Sept. 30, 1846."

Our friend of the *Annalist* remarks, that this settles his claim to the discovery. We hope Dr. Jackson's friends will not allow themselves to be outdone by evidence of this nature.

Prof. Coventry's Report on Cholera.—In January last, we published some resolutions adopted by the Medical Faculties of the Geneva and Buffalo Medical Colleges, commissioning Prof. Coventry, to obtain the latest information in Europe, as to the pathology and treatment of Asiatic Cholera, which, as it was then reported, had made its appearance in France and Great Britain. The latter intelligence, fortunately, proved to be erroneous, and Prof. C., in consequence, did not, witness the disease. The subject, however, was under earnest discussion in France and England, owing to the expectancy of the speedy appearance of the disease there, and Prof. C. was able to obtain the views of some of those who had had the largest opportunities for its investigation, and to compare them with his own views derived from a close observation of the epidemic as it appeared in this country in 1832. Prof. C. has embodied the results of his inquiries and experience in a report which we have the satisfaction to present in this No. of the Journal. In view of the possibility, if not probability, of the reappearance of this terrible scourge upon our shores, we commend the report to the careful perusal of our readers.

Buffalo Medical College.—The walls of the new edifice of the Medical Department of the University of Buffalo, are rapidly advancing. The structure is of stone—a red sand-stone, procured at Lockport, which has not before been used in this city for building purposes. The effect, so far as can be estimated from the present appearance of the walls, will be very fine. The building is one hundred feet deep, by about fifty feet front. It is located on Main Street a short distance above the Roman Catholic church. It is designed that the walls will be completed, and the building enclosed the present season.

Resignation of Professor Hamilton, of Geneva.—Prof. F. H. Hamilton has resigned his professorship at Geneva Medical College, and will hereafter be connected with the Medical Department of the University of Buffalo, exclusively. Dr. Ryan, of Philadelphia, has been appointed to the chair of Principles and Practice of Surgery, made vacant by the resignation of Dr. Hamilton.

Notice.—We beg to call the attention of our readers to the fact that this number of the journal contains eight additional pages. They have been added in consequence of the length of the Report of the Trial for Mal-practice, in order that the publication of that report may not interfere with the usual variety of matter.

College of Physicians and Surgeons of the University of the State of New York.

Since the publication of the advertisement of this Institution in the last number of this Journal, some changes have been made in the arrangements for the next course of lectures. The session will commence on the 30th of October, instead of the 13th, and the preliminary course will occupy the whole of October, one month before the regular lectures commence [see advertisement in this number.] Charles E. Isaacs, M. D., has also been appointed demonstrator of anatomy; a gentleman eminently fitted for the duties of that office.

A word to Patrons.—Our patrons, we trust, will observe that our Journal has recently entered upon a new year—the fourth year of its existence. The effort to render its monthly visitations acceptable, costs us a degree of labor which they know little of, who have never been engaged in a similar undertaking. But this labor we shall continue to bestow cheerfully, provided we have good reasons to believe that the work is fulfilling, in some measure, the useful objects for which it was established. For the flattering expressions with which we have been honored, especially from our brethren of the medical *corps editoriale*, we are deeply grateful, at the same time, being duly sensible, how much of these expressions is to be attributed to their kindness, rather than to our deserts. To those subscribers who have testified both by words, and in a more substantial mode, their sense of the value of the work, we tender our grateful acknowledgements. We have not space to add more, nor are we disposed to occupy much of our pages with these matters. We will close by the *word* to which the foregoing is prefatory:—The present is the most favorable period of the year for the friends of the Journal to renew subscriptions, pay up arrears, and *use exertions to extend its circulation*.

Obituary.—Died in this city, on the 28th ult. Dr. Charles Schmidt, aged 24 years. Dr. Schmidt was a German, educated at the school of Giessen. He established himself here as a practitioner of medicine a year since, and was much esteemed by his medical and other acquaintances. The disease of which he died was Typhoid fever.

Books.—Bibliographical favors already received, have not all, as yet, had due attention. Several books remain, which will be reviewed or noticed in our next number.

Erratum.—On the 193d page, 5th line, for "*clearly* written book" read, *cleverly* written book.

BUFFALO MEDICAL JOURNAL

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SEPTEMBER, 1848.

NO. 4.

ORIGINAL COMMUNICATIONS.

ART. I.—*On the Treatment of Poisoning by the Bite of a Rattlesnake.*
By JOSIAH TROWBRIDGE, M. D.

SIR:—In your Journal for the month of July, I notice an account of the symptoms of, and treatment for the bite of a rattlesnake, in the case of the lamented Dr. Wainright, of New York, taken from the Annalist. I am not disposed to make any strictures on the treatment in that case. The bite of a rattlesnake is of rare occurrence in the Northern States of late years, as they have been nearly, if not entirely, exterminated from the settled portions of the country. I will simply relate what has occurred in my own practice.

I came to Buffalo to reside in 1811, and at that time the rattlesnake was common in many localities in the vicinity. I think some six or eight cases have fallen under my care. I distinctly recollect four of them. I recollect also, the prominent symptoms in two of the cases. The first occurred in 1812. A boy of about twelve years of age was bitten on the side of one foot, near the small toe. Being absent from the village, I did not see him until two or three hours after the accident. The limb was then badly swollen to the body, the skin was discolored and mottled, and, if I recollect aright, of a green and yellow color. The pain was severe, and the pulse accelerated. I immediately directed the administration of Olive Oil, both externally and internally: Internally, by the administration of $\mathfrak{z}\text{ii}$ every half hour, and externally, constantly, with friction. Under this treatment the swelling subsided, the pain was assuaged, and the boy recovered.

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The other was a man of fifty years of age, of intemperate habits. He kept two large rattlesnakes in a box. At about 10 o'clock, P. M., being somewhat intoxicated, he removed the snakes from the box to the floor, and began playing with them. At length one of them struck him between the thumb and forefinger. My office being in the vicinity, a student of mine was requested to attend. He applied salt and vinegar to the hand, and administered aqua ammoniac internally, without relief. At half-past 11 or 12 P. M., I was called. At this time the hand and arm were badly swollen to the elbow, and the pain severe. I directed the administration of the Oil as in the former case. I requested the student to remain with him, and to see that the remedy was faithfully applied until the threatening symptoms subsided. The next morning, at 7 or 8 o'clock, I met the patient upon the side-walk, free from any ill effect from the poison. All the other cases were treated in the same way, and all recovered.

I am aware that numerous trials and long experience are required to establish the character and value of any remedy, and I have not great confidence in antidotes, and less in specifics. In looking back into some of the old medical periodicals, I find that Sweet Oil, as an antidote to the poison of the rattlesnake, is not a new remedy. In Vol. 2d, No. 2, Article 4th, of the Medical Repository, published in 1805, there is an article republished from the Charleston (South Carolina) City Gazette, a part of which I quote. "In great cities, particularly in London, a number of persons procure their livelihood by catching vipers. They are employed by Chemists and Apothecaries, &c. I remember some years before leaving England, to have read in the Philosophical Transactions of the Royal Society in London, a curious circumstance relative to one of these viper catchers. A member of the Society had received, casually, information that a man engaged in this business was frequently bitten, and that he cured himself with Olive Oil. After considerable inquiry the viper catcher was found, and the questions asked, whether he did cure himself with the Oil, and whether he was willing to gratify a number of gentlemen by an exhibition of the fact? The man answered affirmatively to both questions. Accordingly a most numerous meeting of the Royal Society was convened, composed of a considerable number of the nobility, &c. The viper catcher attended, accompanied by his wife, with a large viper, and laying his arm naked to the shoulder, suffered the irritated reptile to strike, which it did forcibly. His wife permitted the poison to operate till her husband's head, face and tongue were greatly swelled, his arm and face also very black, and his senses much affected, when she applied the oil, by pouring a small quantity

down, and bathing the part bitten. The man gradually, and soon recovered. This circumstance being strongly impressed upon my mind, and knowing that the poison of an English viper is considered, in that country, the most subtle in nature, determined me to try its antidotal power in the bite of the rattlesnake, the first opportunity which should offer, on my retirement from Charleston to the back Country, now Pendleton County. I was also particularly impelled to make the trial from a consideration of the newness and wildness of the country, and the number of my family, beside which, there were hardly a dozen more in the county. This was in the year 1786. In about a month after my arrival, a person in full speed came to my camp, and most urgently begged to know if I could assist a man who had just been bitten by a large rattlesnake. Although I lamented the misfortune, I rejoiced at the opportunity it offered to ascertain fully the property of Olive Oil as an antidote to this deadly poison. Accordingly I put a vial of oil in my pocket, and mounted the messenger's horse. When I arrived at the unfortunate man's cabin, he struck me as the most frightful object I had ever beheld. His hands and face were prodigiously swelled, the latter black, his tongue proportionably enlarged and out of his mouth, his eyes as if shooting from their sockets, his senses gone, and every appearance of immediate suffocation. He had been struck on the side of the foot, about the middle, in the hollow. Immediately, but with great difficulty, I got down two table-spoonfulls of oil. Its effects were almost instantaneous, and astonishingly powerful, in counteracting the poison, as appeared by the strong, though quick convulsions that followed. In about thirty minutes it operated strongly, both emetically and cathartically, after which the swelling of the head and face &c. gradually abated, and the tongue began to assume its place. In about two hours, he was so far recovered as to be able to articulate, and from that time recovered fast. The oil inwardly taken, and applied to the foot and leg, both exceedingly swelled, did not exceed seven or eight spoonfulls.

The number of cases of a like nature, in the course of twelve years, has been considerable, in all of which Olive Oil has proved itself to be peculiarly adapted, and fully adequate to the worst of cases, if timely applied."

I find another case recorded in the eighth volume of the Medical Journal of Medical Sciences, page 397, communicated by Dr. Horner, which terminated fatally. It appears that *Ziine* of Olive Oil was administered in two doses, at a long interval between, and the last dose when the man was in *articulo mortis*. The principal reliance in this case seems to have been

upon cupping, external irritants, aqua ammoniac, &c. I do not think that this case makes either for, or against the use of Olive Oil. I copy from the Boston Medical and Surgical Journal of January 5th, 1848, from an article communicated by Dr. Stephen W. Williams, of Deerfield, Massachusetts, the following additional testimony in favor of the use of Olive Oil. "The use of Olive Oil may be strongly recommended for the bite of the rattlesnake. My grandfather, Dr. Thos. Williams, formerly a very distinguished physician in this town, once restored a patient bitten by a rattlesnake, apparently in the last stage of life, by the external and internal administration of Olive Oil. Mr. J. Miller, of Pendleton, of South Carolina, observes, that Olive Oil, taken internally in the quantity of a few spoonfuls, and applied to the bitten part, has proved itself fully adequate to the worst cases if timely administered."

It seems to me that the results in the cases here related, furnish abundant testimony in favor of an early and diligent use of this remedy. That there may be cases which will be fatal under any circumstances, and in spite of the Olive Oil, or any other remedy, is probable, but if it succeeds in a large majority, it is sufficient to warrant its use, and a reasonable reliance upon its powers as an antidote to the poison.

BUFFALO, August, 1848.

ART. II.—*Case of Puerperal Convulsions, treated with Chloroform.* By JAMES P. WHITE, M. D.

July 18th 1848. Was requested by Dr. Devening to see Mrs. Brady, then in labor, and suffering from a violent attack of puerperal convulsions. I found an Irish woman, of full habit, in her third pregnancy, the two previous labors having been favorable. Dr. D. had been with her but a short time; the convulsive paroxysms succeeding each other with great rapidity; the face flushed and pulse full. He had bled her twenty or twenty-four ounces with partial relief. As the pulse continued full, and the muscular efforts during the fits were violent, I deemed it prudent to repeat the bleeding, which was done to about the previous amount. On examination per vaginam, the breech was found occupying the superior strait, the soft parts dilatable, and the pelvis roomy. As the convulsions continued with but slight diminution, and the parts were favorable, though the pains were slight, it was deemed prudent to proceed without delay to deliver the child. To secure the tonic contraction of the uterus, and guard against hemorrhage, two drachms of the wine of ergot were given. It occurred to me that chloroform might assist in controlling the woman, and lessening

the agitation while making the attempt to bring down the child. Dr. D. accordingly applied some of Chilton's preparation to the nostrils, whilst I introduced my fingers into the vagina, and hooked them into the groin of the fetus.

The muscular agitation, which before could not be controlled, now subsided, and delivery was effected without difficulty; the uterine contraction continuing to be moderate. After applying such restoratives as were requisite to recover the child from a state of partial asphyxia, I applied a ligature to the cord, and laid it upon the bed. By placing the hand upon the abdomen, it was found to be still distended. Upon the re-introduction of the finger into the vagina, it came in contact with the arm of a second child, which I proceeded to turn and deliver, the patient inhaling the chloroform, and remaining quiet, with tolerably firm contraction of the uterus upon the hand during the operation. The double placenta and membranes were very soon pushed down into the vagina by the tonic contraction of the uterus, and were removed by Dr. Devening. Very little hemorrhage followed, and the proper bandage being applied, the patient was carefully laid back upon the bed. During the entire period succeeding the application of the anæsthetic agent, the woman was unconscious and calm, but at no time did we carry it so far as to produce stertorous breathing.

21st. The patient comfortable, and consciousness entirely restored. She has no recollection of any thing which occurred during her labor after being seized with convulsions. The children are of good size, and doing well.

25th. From Dr. Devening I learn that the woman has so far recovered as to resume her usual domestic duties.

I have been thus full in the description of this case; from the fact that Chloroform was resorted to. On the introduction of any new medicinal agent, it ordinarily occurs, that a part of the profession become advocates for its indiscriminate use; while, for no better apparent reasons than the love of opposition, or distaste for innovation, another party is formed who perseveringly contest its claims to favor. "The recent controversies regarding the propriety of the use of the agent in question, are a sufficient evidence of the truth of this remark. On the one hand we find Dr. Simpson giving it to all parturient females, saying that, "in midwifery, most, or all of my brethren in Edinburgh employ it *constantly*;" that "no accidents have as yet happened, though several hundred thousands must have already been under its influence;" and he most complacently adds:

"Those who most bitterly oppose its obstetric employment now, will be, ten or twenty years hence, amazed at their own professional cruelty." On the other hand, we find the scarcely less celebrated American Obstetrician, Dr. Meigs, a man, who, like Dr. Simpson, is usually found occupying a partizan position in regard to any novelty, in this instance strenuously opposing its use under all circumstances. He has not exhibited it in any case, nor has he any intention of so doing, remarking in his own peculiar style, "I have been accustomed to look upon the sensation of pain in labor, as the physiological relation of the power of force; and notwithstanding, I have seen so many women in the throes of labor, I have always regarded a labor pain as a most desirable, salutary, and conservative manifestation of life-force. I have found that women, provided they are sustained by cheering counsel and promises, and carefully freed from the distressing element of terror, could in general be made to endure, without great complaint, those labor-pains which the friends of anaesthesia desire so earnestly to abolish and nullify, for all the fair daughters of Eve. Dr. M. believes pain not only necessary, (and rightly as we think in many instances;) but desirable as a guide in obstetric operations; and that mere exemption from pain for a short time, would not justify him "in casting away his safest and most trustworthy diagnosis."

Opposed, as we always are, to "meddlesome midwifery," we can have no doubt that any interference with the process of healthy labor is sure to be followed, sooner or later, by injurious, if not fatal consequences. The advocates for the use of Chloroform do not pretend, that under ordinary circumstances, it does more than merely relieve physical pain. Now if this interference with this hitherto invariable accompaniment of natural labor can be shown to be entirely safe, then it may be well to take the question of the propriety of its uniform use, into serious consideration. A careful reference to the cases reported in the various American and European Journals, will be sufficient, at least, to throw great doubt on this point. For the present, therefore, we are prepared to conclude with Baron Dubois, that: "Its use in midwifery should be restrained to a limited number of cases, the nature of which, ulterior experience will better allow us to determine." It seems to us that anæsthetic agents may be applicable in puerperal convulsions, if, after proper depletion, the muscular contractions continue violent, and especially if turning or other interference become necessary for the relief of the patient. The woman is already unconscious, and you do not, as is the case where unconsciousness is purposely induced, deprive yourself of a valuable guide in the application and use of instru-

ments, On the contrary, if it should produce quietude, you secure an almost indispensable prerequisite to the safe performance of any operation at, or above the brim of the pelvis. Whether in the case of Mrs. B. the quietude was the result of the inhalation of the Chloroform, or of the copious bleedings, without which, in this case, as we think, it would have been unsafe to resort to it, it may be difficult to determine. It is certainly a most *remarkable* instance of coincidence, if the subsidence of the eclampsia were *not* the result of the *combined* effect of the Chloroform and bleeding; and, in our opinion, the result can scarcely be attributed to the single action of the latter.

A careful discrimination in the selection of cases, and a resort to it only with the proper precautions, may, by securing a number of well-attested observations, place in the hands of the Obstetrician an important auxiliary, though none but an enthusiast will look for a panacea.

It is in the hope of contributing in some slight degree to a more rational and judicious selection of cases for the exhibition of anæsthetic agents that this case been furnished.

BUFFALO, August, 1848.

ART. III.—*Principles and Practice of Surgery.* By the late GEORGE M'CLELLAN, M. D. Edited by his son JOHN H. B. M'CLELLAN, M. D. Grigg, Elliot & Co., No. 14, North Fourth St. 1848. 8vo.

Our readers will remember that it is but little more than one year since we were surprised by intelligence of the sudden death of Dr. Geo. M'Clellan, at the city of Philadelphia. Dr. M'Clellan had been for many years one of the most interesting and successful teachers in that "city of medical schools," and had enjoyed both in his public and private practice extraordinary means of acquiring a practical knowledge of surgery. He was known to be a strong and original thinker, and to the thousands who have listened to his instructions, it is no extravagant laudation, to say that his lectures were always enriched with new and practical suggestions, such that the listener never failed to feel himself abundantly repaid for his time and attention.

It was therefore with the more sincere regret that we heard of his decease, because the world had not only lost one of its most useful men, but that too, as we believed, before he had been able to record his valuable experience. But in this book (of the existence of which we were not then aware) his friends and admirers may find a consolation, yet not unmixed with sorrow; for although it is by no means a complete work upon surgery,

such as he was capable of constructing, and such as he had evidently designed, still it is a most precious fragment, and which, like a broken shaft, will serve hereafter to remind all who may look upon it how abruptly his great life was closed.

The work is presented to the public by his son, John H. B. McClellan, M. D., and we shall give our readers the explanation of the peculiar circumstances under which it appears, in the editor's own language.

Urged and solicited from year to year by many friends and pupils, to give the results of a valuable experience, it was not until a few months before his death that the author was enabled to commence his long promised undertaking. The constant interference of a large practice, prevented him from writing except at uncertain and irregular intervals. Many of the accompanying pages were penned whilst suffering acutely from disease, and relief from pain was often sought by occupying his mind in recording the views contained in the present volume. The work, therefore, necessarily bears the marks of haste and deficiency of arrangement, mentioned by the author in his preface. As if forewarned by some undefinable impulse, that he might not be spared to carry out his entire object, he seemed bent upon hastily finishing what was meant to be the first volume, and its earlier pages were actually passing through the hands of the printer, whilst he was endeavoring to complete it. Suddenly cut off in the midst of these labors, the whole manuscript was left in much confusion, and many of the subjects in its latter part were incomplete. With little clue to his intentions, other than the knowledge of his opinions, derived from some years of daily practice and observation with him, I have endeavored to complete all that was left unfinished, in strict accordance with his peculiar views. Preferring to leave everything as nearly as possible as it came from his hands, I have not felt myself justified in interfering with the distribution or division of the different subjects.

Owing to these circumstances, and to the confusion attending the author's sudden decease, a large portion of the work has been hurried through the press without receiving the necessary revision, which will account for the large errata that I have appended. To those notes alone which might be thought not altogether connected with the text, I have attached marks to distinguish them as having been inserted by myself. These chiefly refer to important operations performed by the author, which it seemed due to his professional memory, should be mentioned, and which with many others, I trust at some future period to give more at length. I am not without hope, that with these, and a vivid recollection of his opinions, I shall be enabled to carry out the work to the extent originally contemplated. As now published, the chapters on the different subjects treated of are complete in themselves, and contain most of the important principles of Surgery."

To this we shall add, without any apology for so unusual a mode of review, the "Author's Preface," as found among his manuscript papers. It is so eminently characteristic of the man, that its authorship, could never

be questioned; and it would be as unpardonable to omit this, as to leave out the portrait from the first page of a biography.

I have always believed and asserted that no inexperienced man ought to be suffered to write a book on Medicine or Surgery. The world is already too full of useless publications, which have been, for almost an age, successively copied from each other. As Horace Walpole, after Lord Bacon himself, is reported to have said in his time, we can now almost wish that another Caliph Omar would arise, and burn up the whole library of compilations and plagiarisms which have been accumulating ever since the grand and blessed fire of bibliopolitan Alexandria. But my present situation before the public is somewhat of an exception to my own rule. I have now arrived at that period of life which I always thought entitled an educated and observing man to be heard; and my old friends and former pupils will give me no farther indulgence in the way of resisting these demands. They all claim of me the published reports of my extemporaneous lectures, delivered years ago during successive winters, in the Jefferson and Pennsylvania Colleges of this city. Some of my most attentive hearers have drawn up abstracts for me, and kindly threaten to print a volume of such matter if I do not gratify them by filling up the manuscript blanks with my own corrections and additions, as I can best recollect how they were originally delivered. When I first promised to undertake this publication, I must confess I thought it would be far easier to complete than it has since proved to be. In looking over the manuscript volumes of my best pupils I find they all mistook many important points and connections of ideas, and left too many gaps and interspaces among the different subjects to enable me to use them with any advantage. I have been obliged, therefore, to shut myself up occasionally from the world, at least for an hour or two at a time, and reproduce my former train of ideas and facts, as I was in the habit of giving them extemporaneously in the lecture room. The constant interruptions, however, which a pressing and busy practice has invariably inflicted upon me, have prevented me from any methodical distribution of the subjects or discussions. One idea has necessarily grown upon the top of another, until I have in this manner rapidly accumulated the outlines of my views and experience on the principles and practice of Surgery. Perhaps my oldest pupils will discover from the introduction of the cell doctrine and some other late novelties, that I have not altogether neglected the progress of science since the period of their studentship. I am persuaded that they will find I have substantially preserved the spirit and character of my old lectures—to which they used to listen with more patience and satisfaction than I ever deserved to be gratified with. Believing that they will all feel disposed to pardon whatever appearances of haste and carelessness they may detect in these pages, I therefore give my manuscript, written literally *currente calamo*, to the printer, without even a revision.

The volume opens with the *Immediate Effects of Injuries upon the System*, or what is usually termed the "shock," as a circumstance antecedent to inflammation, and when the shock terminates fatally, constituting the sole morbid phenomenon, a subject which the author rightly thinks has been too generally overlooked. It is the first impression of the injury upon

the nervous system, and is manifested in a diversity of modes. In some cases the circulating system is chiefly made to suffer, the respiratory in another, or the cerebral, or the digestive, or urinary in others. In all of which there is more or less complete suspension of their respective functions, and when most complete the shock is "overwhelming." There is also the "insidious shock," in which although the injury is extensive and severe, yet the patient makes no complaints, the pulse and respiration remain undisturbed and inexperienced medical attendants take no alarm. "Such patients may be compared to the condition of a ship whose rudder has been lost, or whose cable has parted, and a treacherous current is wafting her on rapidly but quietly to the engulfing malstrom." As Hunter remarks, "nature requires to feel the injury," and if in accidents of so grave a character she does not, she will make no effort to repair the injury, and death is almost inevitable.

In accidents less grave, the shock is followed by reaction, which constitutes therefore a new subject, and is considered in a separate chapter:

"In our management of cases of reaction, it is obvious that care should be taken not to allow the procedure to run too high, or continue for too long a period. Direct depletion, however, can rarely be necessary, except in very full habits, and during very violent excitement. There is always some risk of sudden depletion being followed by a repetition of the prostration, or with what we shall subsequently have occasion to notice under the head of irritative excitement dependent on loss of power to sustain itself. In general, sponging with cool water, fresh air, and a moderate elevation of the head, will sufficiently subdue the excitement following reaction of every kind."

Let us be careful, indeed, how we mistake mere excitement for pure inflammatory reaction, less by the injudicious use of the lancet we increase rather than diminish the excitability, and even produce a fatal exhaustion.

"There can be no greater mistake than to resort to severe depletion, under the idea of preventing inflammation. Such a course will render the system irritable, as well as feeble, and be sure to increase the evil of the very circumstance which it is intended to prevent. The slightest punctures and scratches in habits debilitated by repeated loss of blood and starvation, as in the irritable sympathizing temperament of Hunter, have often produced the most malignant and destructive inflammatory processes. In habitual drinkers, it is almost always necessary to resort to direct and constant stimulation after such evacuations as have already been suggested."

Irritation also occurs before the access of inflammation even in such structures as tendons and cartilages, where nothing but vital actions are performed. No definition of irritation is given by our author, beyond the sufficiently vague statement that it is generally believed to be "a mere denangement of the principle of innervation, totally unaccompanied by

vascular excitement." "Deranged" action, "changed" action, "perverted" action, a "new" action, are always convenient phrases under which to conceal our ignorance of the character of the change which has occurred, and may under some circumstances be correctly employed; yet it must be confessed that such pathological explanations are exceedingly unsatisfactory as a basis for correct therapeutics.

Some of Dr. McClellan's remarks under the head of "Irritation in the brain," remind us that he was a disciple to the doctrines of Phrenology, and that in 1838 he published a case of "Spina Ventosa of the skull," with the accompanying morbid physiological phenomena and the subsequent surgical operation. In looking at which report the professional reader might be impressed with the exceedingly bad taste shown in the selection of a daily paper, as the vehicle for the communication, the length and egotism of the article, and the complete failure of the Doctor to make of it a "case" for Phrenology. But if he did not by its publication furnish any new evidence in favor of the science of Gall, he certainly did succeed, with the aid of the sore looking wood cut which embellished the report, and of the extensive circulation of the sheet, in informing the public that he practised surgery and sometimes made capital operations in the city of Philadelphia.

The remarks to which I refer, are the following:

"But from the points just alluded to in regard to the diversity of organs in the brain, it must be inferred that a great variety of symptoms prevails in different cases. Some patients will always crave to go home immediately after a shock, no matter where they may be located, and an incessant expression of this desire will continue for hours. Others will contract a sudden aversion for kindred or friends who are present, and will retreat from them with horror, or quarrel without any provocation. Some will pray and beg for divine aid, others will despond and complain of everything that occurs, while a few rare cases will be full of merriment and laughter."

All of which is undoubtedly true, yet it fails utterly to bring any conviction to our mind of the correctness of the doctrine of Gall, that the mind consists of a plurality of independent faculties, each having a separate and distinct organ for its manifestation. But we shall not stop here to discuss the science of metaphysics, or to arouse phrenology from the deep and eternal slumber into which it is rapidly and inevitably passing. Yet we must be allowed to express our sincere regret that a theory, which, if true would be of such invaluable service to the surgeon, in enabling him with all the precision of geometrical lines to determine to what point of the skull he shall address his remedies, and where apply the trephine, has not borne the test of investigation, and become an established truth.

Irritation of the Urinary Organs is indicated sometimes, according to our author, by *suppression* of urine. Whether simple *irritation*, without inflammation, is sufficient to cause complete suppression of the urinary secretion or not, it is at least sufficiently certain that the suppression often results from *paralysis*, and indeed we believe this is the most common cause after serious accidents. It is also generally paralysis rather than irritation which causes a retention. And this explanation of the common pathology of suppression accounts for its constituting in most cases so fatal a sign. Dr. McLellan, however, has seen the secretion restored after six days of complete suspension. His remedies are, full doses of spirits of nitre, or Hoffman's anodyne, with turpentine and infusions of diuretic herbs, also calomel, nitre and digitalis in combination, or calomel and camphor. Fomentations and counter-irritants are applied to the back and hips.

Irritation of the Stomach forms the subject of the next chapter, in which the treatment must follow the varying conditions of the stomach. *Irritation of the Liver* is manifested by several well known signs; among which the total disappearance of the bile in the secretions, is the most alarming. The principal remedies are cupping, leaching, and counter-irritants, followed by mercurial purgatives and occasionally opiates.

Irritation of the Heart, characterized by irregular and febrile contractions of this organ, and also by disturbance of the functions of respiration. In these cases much discrimination is necessary to determine whether the lancet or stimulants are indicated. But the danger is, undoubtedly, that the young practitioner will oftener resort to depletants, than the injudicious use of stimulants. The indications are here well drawn, and are worthy an attentive perusal.

Irritation in the Nerves, involves the author in a speculative discussion of little practical utility, in reference to the reciprocal connection between irritation of the nerves of motion and those of sensation, as exemplified in the parallel phenomena of spasms and pain. It seems to be designed as a kind of disquisition upon the subject of irritation and would have been more appropriately arranged before the several chapters on the irritation of special organs.

(To be Continued.)

F. H. H.

ECLECTIC DEPARTMENT,

AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Education of Idiots.—The following paper, is from the pen of the distinguished Dr. Sigmond, on "The Idiots of Bicêtre." The humanity, ever connected with all the investigations of Medical Science, which has so warmly espoused the cause of the insane, persuasively leads us to take a deep interest in the movements so recently made to illumine the eclipsed and darkened faculties of this class of persons. Science toils to snatch back trophies from the grave, and with gradual advances the power of medicine is made to win new conquests over disease. The mind, in close companionship with the body, suffers from the deranged actions of the physical structure it inhabits, and often by timely appliances to the system, mental disorder may be removed. But the moral treatment of the insane is a subject never to be omitted in our attempts to restore diseased thought. The power of the will in preventing and curing insanity, has been perspicuously discussed by Dr. Barlow, and for rescuing apparently hopeless idiocy from its thick darkness, well devised methods are given in the paper of Dr. Sigmond.—*Editor Western Lancet.*

3. *The Idiots of Bicêtre.*—Many essays have been lately published on the subject of the extraordinary strides which are being made towards the conversion of the idiot into the man fitted for the ordinary occupations of society. All the publications, however, which have as yet appeared, have proceeded from authors who are recognized in the fields of imagination as legitimate exaggerators of all they see and hear, and are permitted to draw largely on their fancy for illustrations of the pictures they present. At length, we are furnished with something in a more authoritative shape, and the observations of a man of science, and of acknowledged character, are placed before us in a proper form. Upon M. Brierre de Boismont is devolved to give a résumé of the labors of Séguin for the "Annales d'Hygiène Publique;" and previously to his undertaking the task, he determined personally to investigate the present state of the idiots in the Bicêtre, and the result of his experience he has given to the medical profession. His visit was evidently undertaken to ascertain how far the report drawn up by Messrs. Serres, Flourens, and Pariset, in favor of Séguin's method, was borne out by the facts; and, without throwing any censure upon the directors of the Bicêtre, had no connexion whatever with those of M. Séguin, which have attracted so much attention. We will not discuss the claims of France to evincing stronger feelings of humanity than any other nation; nor follow M. Brierre de Boismont through the splendid eulogiums which he has passed on his native land; but we must remind him that Itard and Pinel, to whose labors he pays a proper compliment, forgot not to point to Willis and Crichton, of England, as the founders of the system of moral and of humane treatment for those unfortunate

beings whom modern science has taught us to treat with sympathy. As we hope to have the opportunity of elsewhere considering both Séguin's "Hygiene et Education des Idiots," and likewise his recent energetic protest in favor of Perere, as deserving the honors we now give to the Abbé de l'Épée, we shall confine ourselves to M. Brierre de Boismont's description of the scenes which offered themselves to him when he was admitted to the school of idiots. This portion of the institution is under the management of Dr. Voisin, and has for the last three years been under the more immediate superintendence of M. Vallée, who, accompanied by M. Mallon, and three American physicians, paid every attention to the wishes of the investigator, and explained to him the views which were entertained by the administration of the establishment. M. Mallon, the director, observed, "Our object is to bring into action the best part of that which remains to these helpless beings of motive power, and of their moral and intellectual faculties." Acquainted with the mechanism which too often attends exhibitions intended to cajole individuals in favor of institutions, M. Brierre de Boismont was soon interested in all he saw, and laid aside all those suspicions which at first naturally take possession of the mind, and lead to doubts of the sincerity of those who guide, and of the reality of the benefits which are said to be produced.

The class consisted of about fifty idiots, amongst whom were about a dozen epileptics, who, by their superior intelligence, served as monitors. M. de Boismont passed them in review with great care; the stamp of idiocy was on the face of each, varying certainly in its intensity, but indisputable. They were ranged in a semi-circle in face of the investigators. They stood all calmly upright, making no disorderly movement, and each retaining his rank. They were of all ages, from six up to eighteen. Their appearance bespoke health. During a whole hour, whilst they were under examination, they committed not the slightest act of indiscretion, showed no want of discipline, nor made use of any improper expression. The first exercises consisted of singing, in which all but three or four took part. The intonations were correct, and all in harmony. The pieces consisted of hymns, and the orchestra was composed of blind persons. A little child of six years of age, only a few months in the establishment, who had been brought in in a most deplorable condition, scarcely able to pronounce, and kept with difficulty in any one posture, sang with feeling and propriety three stanzas, which were repeated by the other idiots in chorus. This child afterwards repeated with distinctness, and with well marked emphasis, the fable of the Wolf and the Lamb. Dancing was executed with great precision, and even elegance, by three of the children, whilst the other idiots looked on with attention. One of the assistant-masters made three other idiots go through the military exercise without the commission of the slightest mistake. The copy-books of the children were exhibited in a frame; they were clean, well kept, and so correct as to bear comparison with those of the most intelligent children. There was one idiot whose appearance particularly struck our author; he was paralytic, squinted, and his mouth wide open, his tongue rolling out of his mouth; he articulated very indistinctly, he dragged himself upon his knees, and his hands were deformed. His writing, nevertheless, was very legible in large characters, and it was kept very clean. That no doubt could be entertained of the identity, W. Vallée placed him near the table, and put

before him a slate, on which, after writing the name of M. de Boismont, he desired the idiot to copy it. This was done in a legible hand. It is necessary, says the examiner, to have seen the face, the gestures, and this type of idiocy to form an idea of what patience, what perseverance must have been bestowed to obtain such a result. This same idiot played a game of dominoes with Dr. Fisher, one of the American gentlemen. His exultation on taking a domino was very striking. The first game going against him, he exhibited evident marks of discontent; and when his adversary placed his last domino at the end of the board, the poor idiot threw himself at the back of the chair, exhibiting his desire to be taken away; but when the American physician offered him his revenge, he expressed the greatest satisfaction, which was extreme indeed, when he found he had gained the victory. The instructor then placed before him a copy of several words, and a case where the letters of the alphabet were arranged, and then asked him to imitate one of the words which he pointed out. The poor idiot, rubbing his hands with pleasure, looked out the letters successively, and composed the word required. M. Vallée then called forward an idiot of about fifteen years of age, and requested M. de Boismont to dictate a phrase. He wrote it out immediately without making the slightest error in orthography, and with all the capital letters correct but one. On his being simply asked if the whole was correct, he effaced the small letter to place a large one. After some short time, the gymnastic exercises followed upon the intellectual ones. Two children swung themselves by their feet. Five idiots placed in a line, and who had just commenced their education, drew out, one after the other, the different parts of the face, as they were pronounced by the master in a loud voice; they made but few mistakes. One idiot particularly arrested the attention of M. de Boismont; he was between fifteen and sixteen; the absence of expression in his eyes, the movements of his head, his stuttering speech, his whole appearance bespeaking him to be one of the most characteristic types of the class of idiots. The director called for the book describing him at the period of his admission, which was found to be the month of June, 1843.

He was there described as being incapable of articulation, or of remaining tranquil for one instant, executing the most irregular movements and the most disgusting actions, urged on by instinct to self-destruction, having but one redeeming quality, the desire of approbation; indeed the picture drawn of him at the time of his admission can scarcely be given. At the invitation of M. Vallon, he named all the geometric figures, formed of pasteboard, which were placed in his hands, he drew them upon paper with the assistance of a rule and compass; this was accompanied by some hesitation; then he repeated several times the name. Upon a bandage being applied to his eyes, he named the different forms presented to him. A small chest of drugs, containing twenty different substances in rows, was placed before him; he named each article that was presented to him when uncorked; he paused a little when the odors were not very powerful, but ether and ammonia were in a moment recognized; the taste served him as a guide to some; when the bandage was again applied, he distinguished the substances, with very few mistakes. A card on which different colors were painted was shown him, and he pointed them out correctly; a series of figures he counted when there were not more than two, but he hesitated

when there were three, the units and the tens he fully comprehended, but when the amount was hundreds he paused. Another idiot of fourteen added and multiplied with great exactness. The mental operations of some of the individuals were accomplished by considerable labor; thus, one of them having been asked to divide twelve counters which were given to him into half, first ranged them all in one long column, then taking them one after the other away from the top, placed them side by side until two equal columns were formed, then stopped, and pointed out that his labor was completed; upon being asked to divide them into four, he again placed them into one long column, and taking three from the top placed them side by side of the original column, till he had made his four equal lines, and then again pointed with his finger to what he had accomplished. M. Vallée pointed out one of the idiots who had the most extraordinary facility for calculation, and who performed the most complicated multiplications instantaneously. His mental operation was to multiply the units, the tens, and the hundreds separately, and then to add the whole result. Upon being asked to multiply sixty-four by forty-two he gave the product, 3968, before the master had time to calculate with his pencil. After this exhibition, the party of investigators went into a hall where were exhibited about thirty drawings, well executed; and there were placed, each following some avocation, as a joiner or a shoemaker, most of the idiots they had so lately examined. Among the joiners was the idiot who had excited so much attention; he was polishing with great care a large board; some were making small pieces of furniture, others window-blinds; everything was made by themselves; they were permitted to use scissors, planes, vices, presses, and no accident had occurred. The greatest silence was preserved in this shop, as well as in that of the shoemakers. They took up several pieces of leather, which they had sewed with great exactness, the ends being in perfect straight lines; more than sixty pairs of shoes made by them were shown. Some of them were fond of agricultural pursuits, and in fine weather employed themselves in work out of doors. It was remarkable, that although attentive to all that passed, they scarcely spoke, and the same isolated state was observable in the workshops. The ideas, however, are so limited amongst idiots, that the necessity of communicating them is scarcely felt.

M. de Boismont concludes with a well-merited compliment to Messrs. Vallée and Mallon for the part they have taken in this interesting experiment, and for the care they have bestowed upon these unfortunate beings. By dint of patience, of determination, of capacity, poor idiots have arrived at the power of reading, writing, calculating, drawing, but that which is more important still, they have learned to work. It is, however, to be borne in mind, that the master, the teacher, is always at their side, directing them by gesture, by voice, by look—that, in fact, he is their leading-file. But still there can be no comparison between them and the idiot, chuckling, bawling, howling, incapable of every sort of labor, deprived of every moral sentiment, having only animal instincts, and there can be no doubt that some of these individuals will gradually be raised above that miserable condition to which they were apparently destined; and as science extends her domains, and unites with the spirit of humanity and benevolence, there will be rescued from their deplorable state, souls to which may be extended the hopes, the comforts, and the expectations of eternal hap-

piness, which spring from the truths of religion. Useful certainly are these strictures of M. de Boismont, and most sincerely do we desire that he may be led by what he has seen still farther to inquire into the development of the senses, and to examine strictly into the works of the experienced men who are cultivating this new field of enquiry, so that we may have in those archives which are becoming so important to medical science, a faithful review of the labors which are now prosecuting in France, and from which we have a right to expect so much; if, as he imagines, his predecessors have left behind them richer treasures than are to be found in other countries, so much more does it behoove those to whom power is now delegated to scrutinize that which is passing before them with earnest zeal, and with a determination to support that which promises to be most useful to man. If he is perfectly satisfied that the system which is proposed by Séguin is superior to all others, he is acting an honest part to uphold it in preference to all others; but he must remember that, as his opinion will carry weight with the scientific world, he must not hastily pronounce a judgment that he is not prepared to uphold during all the stages of inquiry.

—*Journal Psychological Medicine.*

On the Modus Operandi of the Poison of Venomous Reptiles, &c. By ALEXANDER MEANS, A. M., Professor of Chemistry and Pharmacy in the Medical College of Georgia, and Professor of the Physical Sciences in Emory College, Oxford, Ga.

The following article came under notice while referring to the back numbers of our exchanges in order to discover what had been communicated with respect to the treatment of poisoning by the bite of a rattlesnake. This examination was suggested by the interesting article by our esteemed correspondent, Dr. Trowbridge, contained in the original department of this number of our Journal. In connection with that article, we have thought that the essay by Dr. Means would be acceptable to our readers. It was published in the *Southern Medical and Surgical Journal* for January, 1846.—EDITOR BUFFALO MED. JOUR.

"The brief disquisition which follows, was called forth in reply to some interesting inquiries received by letter from an intelligent young friend ardently engaged in the study of Medicine, and who had for some time been prosecuting a series of experiments upon the virus of serpents.

The article, therefore, was not written for the Journal, but at the special request of some medical friends, it has been hesitatingly submitted for publication, with the humble hope that the views which it presents, may aid, at least some of the *younger* members of the profession, in forming correct opinions upon the mode of action and pathological effects of animal poisons—an important pre-requisite to the administration of judicious and appropriate remedies.

First, then: How do poisons act upon the human system, (especially the poison of serpents,)—is it through the medium of the *blood*, or from impressions made upon the sentient extremities of the *nerves*, and com-

municated along their tissue to the several nervous centres? So late as twenty years ago, in contravention to the doctrines of "the humoral pathology," Professors in the *first* medical schools in the United States, taught that *morbific*, as well as *sanative* impressions were propagated *exclusively* by *sympathy*, from one point to another of the human system; nor would they even allow the necessary intervention of the nervous tissue, as the *Odos* along which these impressions were communicated. More sound physiological views now generally obtain, but there are yet many medical philosophers, who reject the doctrine of *venous absorption*, and regard all impressions as communicated by nervous impulse. The most modern of those who have presented a plausible defence of these views, accompanied by appropriate (?) experiments, are Addison and Morgan, in an "essay" published in London in 1829, "on the operation of poisonous agents." These gentlemen, however, only deny that absorption is *in any case necessary* to the operation of poison, and yet contend vehemently against the action of medicinal agents *at all* through the medium of the circulation. A distinguished Professor in the medical department of the Pennsylvania University, has long been an uncompromising unbeliever, and an exclusive solodist of the old school, and so far as is known to the writer, has never, to the present hour, publicly announced any change in his views. Dr. Charles Caldwell, of the West, has also, for more than twenty years, as well in the lecture room, as from the press, warmly and inflexibly vindicated similar opinions. Now, we held the doctrine of Imbibition to be so well settled at the present day by the experiments of Magendie, Muller, Blake, Mitchell and others, as to challenge skepticism itself. But to the question more directly. Do poisons act by this process? 1st. It is known that whatever promotes absorption, hastens the action of medicines. 2nd. Almost every medicinal and poisonous substance, whose sensible or chemical properties subject it to ready detection, has been discovered in the blood or some of the secretions formed from it—and this too after the ordinary modes of administration. But the rapidity with which some deleterious agents act, has given rise to the opinion that these morbid impressions could not have been made through the circulatory system.

Now from Mr. Blake's experiments, half a drachm of concentrated hydrocyanic acid (one of the most virulent and diffusible poisons in the world) when poured upon the tongue, produced no morbid symptom until after the lapse of *eleven* seconds—death ensuing in *thirty-three* seconds after its administration, and this too when the fatal result was no doubt hastened by the inhalation of the vapor and its diffusive contact with the mucus lining of the air cells, which, according to Leibig's recent experiments, constitutes the most speedy and effective mode of action for this poison. Whereas by the result of satisfactory experiments by the same gentleman, (Dr. B.) Prof. Herring, of Stutgard, &c., it is ascertained that a substance will pass from any part of the vascular system in *dogs*, back again to the same point, in from *twelve* to *twenty* seconds. Now poison, it is believed, does not act in less than "*nine seconds*" (and this limit we think too small) after its introduction into the capillaries or veins, and therefore there is sufficient time for the poisonous molecules to pass to the various organs and tissues by the blood. Again: the manifestation of poison from the bites of venomous reptiles, in all the cases which I have

known, or of which I have read, do not occur in less time than this, and may therefore be supposed to act through the venous channels.

One of the worst cases which occurs to my recollection, and which originated from the bite of a viper, is that described by Dr. Braun, and reported by Dr. Christison in his work on poisons, where a professed snake-charmer attempted to show that he could thrust the head of the animal into his mouth with impunity,—he introduced it, but suddenly dashed it from him with violence, when it was ascertained “that he was bitten near the root of the tongue.” Here, where the part was so *vascular*, so *moist*, and so liberally supplied with *nerves*, it was not until “a few minutes afterwards,” says the Doctor, that “he became so faint that he could not stand, and died within fifty minutes.” This case, therefore, allowed sufficient time for venous transmission.

Before we abandon our enquiries upon this point, it is proper to remark that the distinguished author from whose valuable and popular treatise the above case has been extracted, and who at one time was inclined to favor the doctrine of the sympathists in accounting for the diffusion of poisonous impressions, has evidently felt himself somewhat embarrassed in the maintenance of those views, since the experiments of Mr. Blake upon hydrocyanic acid, and although, at the time in which his last edition was ready for the press (Nov. 1844) he was confessedly not convinced that this virulent poison always acts by absorption, yet, with the ingenuousness characteristic of a great mind, he remarks, “on a dispassionate view of the whole investigation, it must be granted to be doubtful, whether this argument” (i. e., in favor of a sympathetic action,) “can now be appealed to in its present shape with the confidence which is desirable. And on the whole, the velocity of the circulation on the one hand, and the celerity of the action of certain poisons on the other, are both of them so very great, and the comparative observation of the time occupied by the two phenomena respectively, becomes in consequence, so difficult and precarious, that it seems unsafe to found upon such an inquiry, a confident deduction on either side of so important a physiological question, as the existence or the non-existence of an action of poisons by sympathy.” The discovery of Dr. Herring of Statgard, made a few years before, and reported by Dr. Christison himself, had shaken “the validity of many, though not all, of the facts which had been previously referred to the agency of nervous impression, on the ground of the celerity with which the effects of poisons are manifested.” In this case it was shown that “the ferrocyanide of potassium, injected into the jugular vein of a horse, was discovered throughout the venous system at large in the short space of *twenty or thirty* seconds, and consequently must have passed in that period throughout the whole double circle of the pulmonary and systemic circulation.” The vast improvements in chemical analysis within the last few years, (some of them, since the first publication of Dr. C’s excellent work,) and employed by toxicologists in the detection of poisonous agents, circulating in the blood, have contributed much to throw light upon this hitherto obscure region of physiological research. These discoveries, together with very recent toxicological experiments, some of them even since the publication of the *last* edition of the treatise referred to, incline us but the more confidently to maintain the views above advanced, viz: that to venous transmission, and not to sympathetic action, we are to refer the

morbid phenomena which result from the introduction of poisons into the human system. Among the most recent experiments furnished from any quarter are those of Dr. H. Meyer, upon the effects of prussic acid, and reported in the October number of the British and Foreign Medical Review. He confirms the correctness of Professor Emmert's experiments, to which we may hereafter refer, and states that "he found it to act *only* when received into the vascular system. On mechanically arresting the circulation, the poison did not act, although the integrity of the nervous system was preserved. On restoring the circulation, the operation of the poison was immediately observed." And again, as regards the lapse of time which intervenes between the introduction of the poison and its deleterious effects, he adds: "Hydrocyanic acid does not act so rapidly as it was formerly believed. Its operation was *never* instantaneous." The fallacy of the prevalent opinion that the deadly effects of this formidable volatile compound are experienced *immediately*, or at most within a *few seconds*, after its administration, so as to allow no time for acts of volition or locomotion, has been repeatedly proved.

A case, first reported in the *Lancet* of June 7th, of the present year, and again furnished in the last number of the *Medical Review*, is strikingly illustrative of the fact that there is time for freedom of thought and deliberate action, even after the largest draught of the poison, before its paralyzing effects are experienced. "A girl swallowed an *ounce* of prussic acid, recorked the phial, thrust the bottle to a full arm's length between the feather bed and the mattress, got into bed, and then drew the clothes over her body." Again, this "protraction of symptoms" is still more satisfactorily evinced in a case reported by Mr. Godfrey, in the *Provincial Medical and Surgical Journal*, and copied into the *Review*: "A gentleman swallowed *half an ounce* of prussic acid, placed the bottle in the grate, walked to the top of a flight of stairs, (ten paces) descended the stairs, seventeen in number, and proceeded to a druggist's shop, (forty-five paces) making a total of fifty-five paces and seventeen stairs. He entered the shop in his usual manner, which was slow and easy, and said in his usual tone of voice, 'I want some more of that prussic acid'—his eyes then became fixed with a stare, he fell and died (probably) within ten or twelve minutes from the time of taking the poison." In fact, the violence of the action of this fatal drug has generally created such alarm and confusion in cases where it has been taken, that the celerity of its effects, although fearfully rapid in any event, has probably been exaggerated. From the very infrequency of its former administration, perhaps, these overwrought estimates of its speedy fatality required some time before they could be corrected. And nothing but, careful observation, and a comparative familiarity with the alarming results of its action, could have enabled the medical philosopher deliberately to mark the progress of the pathological phenomena which it exhibits, and which are so readily traceable to its absorption and diffusion through the venous circulation. This being the most prompt and formidable article under the whole survey of toxicology, we have dwelt the longer upon its action, because if its rapidly occurring symptoms allow sufficient time for the vascular transmission of the absorbed poison, then we need entertain no scruples upon that head in regard to the *modus operandi* of the most intensely active virus found within the limits of the animal kingdom.

But *secondly*: If poisons act through the blood, how is the action propagated? I answer, it may be—1st, by maintaining its identity in the circulation, and thus being brought in contact with the structure of the organ or organs which it affects. Or, 2ndly, by acting chemically upon the constituents of the blood, and thereby so altering its vital condition as to unfit it for the purposes of life. To consider the *first* mode then. It is found by experiment that tartar-emetic, castor oil, strychnia, opium, and many other articles whose specific effects upon the stomach, alimentary canal, nerves, &c., when administered *per orem*, are well known, manifest precisely the same properties, and are directed in their action to the same organs or tissues, when *injected* into the *veins*,—proving, that their introduction into the circulation did not deprive them of their identity, and of their capability to excite their accustomed functional changes upon the various organs, most susceptible of their several specific impressions. Why, the medicinal molecules of tartar-emetic, when diffused throughout the mass of the circulation, should *prefer* to manifest their effects upon the *stomach*, rather than the lungs, the kidneys, or the salivary glands, is a question which has proved the sarcasm of a popular American writer,* and yet the astuteness of intellect which characterizes the Philadelphia Professor, would *surely* find no more difficulty in allowing such preference than in allowing the well established philosophical fact, that while *Light* is pouring upon the *ear*, the *palate*, and the *nostril*, with an intensity equal to that with which it falls upon the *eye*, yet the latter organ alone is sensitive to its action;—BECAUSE *neither the auditory, nor gustatory, but the visual nerve exclusively, was constituted to depend for the performance of its important function upon the peculiar stimulus of that one agent, and the whole mechanical organism of the eye was designed for its admission and made subject to its laws*. In fact, every organ and every tissue has its own susceptibilities to impression, and the appropriate qualities must exist in the agents employed to act upon it, before the characteristic developments of its nature can be expected.

By this sort of *physical election*, it would seem, the poisonous alkali, *conia*, acts upon the nervous system violently, by destroying its irritability and inducing paralysis. Probably the poison of some venomous serpents, sent rapidly by the torrent of the circulation to the *heart*, paralyzes that muscle, and occasions almost instant death, in accordance with the conclusions drawn by Dr. Meyer from his experiments with hydrocyanic acid. Toxicological researches authorize the belief that poisons, by thus coming in contact with organic structures may derange functions or effect injurious and even fatal lesions. And if Magendie's observations are to be credited, even so bland, innocuous an agent as *atmospheric air*, when introduced into a vein, may, by its mechanical admixture with the blood-globules, so interrupt the pulmonary circulation as to produce asphyxia and death.

But to pass to the consideration of the *second* mode, i. e.—by *chemical combination*. And here let me premise what follows by remarking, in the language of Leibig,† that “no other part of the organism can be compared to the *blood*, in respect to the feeble resistance which it offers to exterior influences. The blood is not an organ which is *formed*, but an organ in

*Sec Chapman's Therapeutics, fourth edition, vol. 1, p. 73.

†Leibig's Chemistry in its application to Agriculture and Physiology.

the act of formation; indeed it is the *sum* of *all* the organs which are being formed. The chemical force and the vital principle hold each other in such *perfect equilibrium*, that every disturbance, however trifling, or from whatever cause it may proceed, effects a change in the blood." A great variety of substances are known by chemical action to cause signal changes in this fluid—as well acids and alkalis, as metallic salts and alcohol, &c. These substances perhaps mainly act upon the fibrin and albumen, and upon the constituents of the blood disks. *Hydrocyanic acid* unquestionably changes the *consistence* and *color* of the blood, and exhales its characteristic *peach-blossom odor* from almost all parts of the body, early *after death*, and even *before* through the *breath*—especially from the serous membranes, and has been detected by Meyer in the form of *cyanide of potassium*, not only in the blood, but also in the serous secretions and sundry soft solids. Oxalic acid, acetates, citrates and tartrates, are satisfactorily known to undergo decomposition in the course of the circulation. But I find myself involuntary overrunning my intended limits, and must withhold. From what has been said, however, we feel warranted in believing that some poisons act by forming compounds with the constituents of the blood which incapacitates it for vital purposes.

While, therefore, we could hardly feel justified in unequivocally denying the sympathetic action of *all* poisonous agents, through the nervous tissue alone, yet we must regard the burthen of facts and experiments as opposing the existence of such action, while their *venous distribution* has been established in many instances, *beyond question*. Emmert and Christison (and their experiments extended still farther by Blake) have *both* found that some of the most virulent poisons "have no effect whatever when the circulation of the part to which they are applied has been arrested." Again, they will not act upon a dissevered nerve, (though it may still retain its *irritability*,) when that nerve is isolated from the circulation. Nor will poison introduced into the largest blood-vessels, around which a ligature has been thrown in advance, act *at all*, (though the nerves of the part are all left *entire*,) until the ligature is removed—it then acts rapidly. Lastly, (upon this point,) Magendie, Brodie, Emmert and others, have tested the *quick, full*, and characteristic effects of poison by injection into the blood-vessels, when all the nerves supplying the part had been previously divided. Once more: If *nervous* influence propagated poisonous impressions, then surely as the *cutaneous* surface is covered by a perfect, unbroken net-work of nervous tissue, so continuous and extended that a pin's point cannot be laid down without striking a nerve, then a superficial snake-bite, where the fangs of the animal have but freely scratched the part and lacerated a great many nervous fibrillæ, ought to prove the most dangerous, as furnishing so many more points of radiation for the virus, whereas it is the fact that such bites are comparatively harmless, while those in which the fangs have penetrated deeply, as in the finger or foot,—where the part could be included within the jaws of the reptile, and the poison was injected in the neighborhood of deep-seated blood-vessels, have been uniformly most fatal.

And now, to your next enquiry:—Is Orfila right when he recommends *sleep*? If the views which I entertain of the pathology of such cases be correct, his counsel in this particular is certainly injudicious. My own conviction is that, like opium, conia, foxglove and tobacco, the virus of

serpents deserves to be classed with the *cerebro-spinants* of Pereira, or those agents which excite the cerebral and true spinal system of nerves,—acting as powerful sedatives in reducing the force of the circulation, and either paralysing some portion of the nervous tissue by which the vital functions of the part are immediately suspended, (as, for example, the action of the *heart* or the *respiratory muscles*;) or subtracting from its general healthy tone, and exciting irregular, spasmodic movements.

Mark the symptoms caused by the bite of the viper, (the only poisonous serpent known in Great Britain,) as detailed by Dr. Christison,* and compare them with some produced by the class of agents above referred to—viz: “lancinating pain, which begins in from three to forty minutes after the bite, and rapidly stretches up the limb—swelling, at first firm and pale—afterwards, red, livid and hard,—*tendency to fainting—bilious vomiting—sometimes convulsions*, (more rarely, jaundice,)—*quick, small, irregular pulse—difficult breathing—cold perspiration—dimness of vision and injury of the mental faculties*.” Now the cardiaco-vascular sedatives, fox-glove and tobacco, “produce *nausea*,—sometimes *vomiting* and *purging—weakness and irregularity of pulse, syncope, impaired vision—giddiness and confusion of ideas*: while *paralysis, convulsions, delirium and stupor*, are occasional symptoms.” The strong coincidence of symptoms will at once be recognized by comparing the words in italics. It is also a singular and interesting fact, in accordance with our view, that loss of intellect and sensation, with convulsions, generally result alike from the use of *hydrocyanic acid*, from *epilepsy*, and from *excessive hæmorrhage*, and that in *all these cases, ammonia* is a valuable remedy. Does not this argue a *oneness* of pathological condition to which the same remedial agent is applicable? Now that condition in *hæmorrhage* we know to depend upon an *atony* of the nervous system induced by the *sudden abstraction* of too great a quantity of *blood*—the natural stimulus of that tissue: and it may be legitimately inferred, therefore, in the other two cases. Why not also in cases of poisoning by serpents—where the *same restorative* (ammonia) is so successfully resorted to? The rationale of its operation we design to consider presently. But can *sleep* be advisable with these facts before us? We are again constrained to answer, No. Indeed, from our views of the character of the poison, and the superinduced condition of the system, we can but believe it would contribute to hasten a fatal termination. An atony of the nervous system has already been produced: it is *below par* in its functional capabilities, and, as the effects of *cold* and *opium* which overcome nervous sensibility, must be arrested by *rousing stimulants*, even amounting, in some cases, to the use of violent mechanical force; so, we apprehend, the influence of this class of sedative poisons, should be counteracted by *forced wakefulness* and *stimulants*. Every reader of history is familiar with the fact, that in crossing the frozen Alps, on their return from Egypt, the soldiers of Bonaparte were sinking by hundreds under the contrastulant effects of *cold*, and were only preserved by *flogging*, from falling into the *sleep of death*. How, then, may a combination of alcohol and ammonia (say in the form of brandy and hartshorn) operate favorably as an antidote to these poisons? I suppose that without resorting to a solution, dependent upon the chemical change in the substances, (which

* See Christison on Poison, vol. 2, p. 485.

we are satisfied, in some other instances *does* go on,) we may rationally account for their antidotal effects, by remembering that according to the best authorities in Pharmacodynamics, the specific region of action for *alcohol* is the *cerebrum* and *cerebellum*, while *ammonia* manifests its power mainly upon the *true spinal or excito-motory system* of nerves. Here, then, by the combination, we reach the nerves of the *encephalon* and *spinal marrow both*. May it not be, therefore, by this *extensive* rally upon the partially exhausted irritability of the nerves through the great thoroughfare of the sanguiferous channels, that these dreadful sedatives are counteracted. *En passant*, let me not forget to *urge*, in such cases, the propriety of inhaling as freely as possible the *vapor* from *diluted aqua ammonia*—(the concentrated water of the shops is too irritating and may produce troublesome or even dangerous inflammation of the mucous lining of the air passages.) The restorative salt, *carbonate of ammonia*, furnishes also a good form for inhalation. In both cases the minutely divided particles of æriform ammonia comes in extensive contact with the *whole mass* of blood circulating through the lungs, (the membranous coverings of the air-cells being readily permeable by gaseous bodies,) and consequently its characteristic effects are more promptly and decidedly manifested. But to conclude. The poisonous injections from the stings of insects, such as the wasp, the bee, the hornet, &c., may be regarded, we apprehend, as acting under some of the laws already considered.

Our opinions in regard to the pathology and *modus medendi* of such cases, may be briefly enunciated, however, as follows, viz:—The injected virus, by its powerful contra-stimulant effect, is supposed to produce a temporary spasm or paralysis of the capillary tubes, incapacitating them from conveying red globules, within the reach of its action, which is generally defined by a circumscribed, colorless areola, surrounding the point of puncture, but as the poisonous deposit is small—is introduced superficially, and is consequently limited to a small circle, the vitality and vigor of the neighboring circulation at length overcomes the morbid inaction, and an over-excitement takes place in the form of cellular inflammation, which, when uninterrupted, always ends in resolution. But, as in a case of superficial *pinch* or *bruise*, followed by whiteness of the part and injury of the subcutaneous vessels, it is known that immediate mechanical irritation, in the way of friction, will sustain and recruit the crippled and languid capillaries, from which the blood has been violently expelled, and enable them forthwith to transmit their usual contents,—thus at once restoring the circulation of the part and preventing *ecchymosis*:—so, by a process *not greatly* dissimilar, we suppose that the prompt and peculiar action of *ammonia* instantly overcomes the hyposthenic effect of the poison—restores tone to the *nervous* and *vascular* systems, and prevents subsequent inflammation. I have seen strong tincture of *camphor* almost instantly relieve the sting of a wasp; and although I have never tried it, see no good reason why sulphuric ether, liberally applied and *retained on the part*, might not prove a quick and valuable auxiliary to our list of antidotes.

Chloroform—By R. D. MUSSEY, M. D., Professor of Surgery at Cincinnati, Ohio.

DEAR SIR,—Some time since, I sent you a short communication, expressing a favorable opinion of chloroform as an anæsthetic agent in surgical operations. I now write to say, that a more extended experience with this article has served to confirm the good opinion of it I then entertained.

I have performed *fifty-nine* operations upon patients under its influence, and there has not been a single instance in which it has left unpleasant effects. I still prefer it to ether, on account of the smallness of the quantity required, the greater certainty of its making the requisite impression, the greater expeditiousness of its operation, the less irritation it gives to the glottis, its inferior liability to agitate the voluntary muscles, and the more speedy evanescence of its influence after the patient has ceased to inhale it.

In all cases the operations have been attended with *very little* or *no pain*; often an entire suspension of consciousness; sometimes a full consciousness of what was going on, without the sensation of pain. Within the present week, I amputated the thigh of a much-valued clergyman for an extensive ulceration of the knee-joint. He was much reduced in flesh and strength, and his nervous sensibility was so great that he contemplated the operation with the deepest horror. He was put under the influence of the chloroform while the limb was removed and the wound dressed. When he awoke and found that the operation was over, he clasped his hands and gave thanks to God for having bestowed a boon of such priceless value upon the suffering family of man.

Yesterday I operated upon a teamster for strangulated hernia. The strangulation had existed forty-eight hours; the tenderness of the abdomen, the persevering vomiting of fecal matter, a small and frequent pulse, great restlessness, and prostration consequent upon free bloodletting, the tobacco glyster, and the other means which had been employed for relief before my arrival, offered an uncertain prospect for ultimate success. The chloroform was given, and its influence kept up through the operation. The man appeared to have got into difficulty with his *horses*, spoke roughly to them, and talked incoherently during the whole time occupied in the operation. After he had roused up a little, I asked him if we had hurt him? he said "no, except a little when you tried to pull me off the potatoe cart." This morning he was better; slept a good deal through the night, and considerable hope is entertained of his recovery.

In two cases of lithotomy, I have operated while the patients were kept still with the chloroform. Neither of them felt pain. One, a boy of 8 years, the other a boy of 12. The latter, sensitive and obstinate, was brought and confined upon the operating table only by force. When everything was in readiness for giving the chloroform, he requested that I would *not begin to cut till he was asleep*. After he had made a few inspirations, observing his eyelids drooping, I asked him if he were sleepy; he said, *yes, but don't cut till I am asleep*. In a few moments his eyes were closed, and the muscles of his limbs were soft. I then proceeded to the operation, extracted the stone, and was about to untie him, when he opened his eyes, and said, "*doctor, don't begin to cut till I get to sleep*."

When administered to patients in the horizontal position with an empty stomach, and introduced gradually into the lungs, the safety of this agent

need not be questioned. There is a dose of arsenic or opium that can kill a patient, and at the same time another dose that is entirely safe; it is so, I believe, with chloroform; and I cannot help regarding it as one of the most important gifts for the relief of human suffering, that a kind Providence has sent us in this or any other age.—*Boston Med. and Sur. Jour.*

CINCINNATI, July 5th. 1848.

On Certain forms of Headache.—By Dr. MURPHY.

[In an essay read before the South London Medical Society, the author described the following varieties of headache: 1st, Periosteal headache; 2d, Rheumatic headache; 3d, Nervous headache, 4th, Anæmic headache; 5th, Congestive headache.]

1. Periostitis of the cranium is seldom met with unless after a mercurial course, in a scrofulous constitution, and is generally found to invade either the coronal or parietal bones. The diagnosis of headache arising from this cause, although not difficult, has sometimes been erroneous. The pain is severe, and confined to one or more of the localities above mentioned; it is increased at night in bed, by stimulating drinks, and by pressure. A raised surface can be detected at the site of the pain, and on inquiry it will be found that more than one course of mercury has been given. The treatment should consist in the application of the emplastr. hydrargyri spread on thick leather, and the exhibition of the iodide of potassium with morphia and tincture of digitalis.

2. Another form of headache is the rheumatic or fibrous, which is located in the tendon of the occipito-frontalis, the temporal aponeurosis, and tendinous insertions of the muscles at the back of the head. It is usually preceded by rheumatism of other parts, and is increased by muscular movements. Warm coverings, when they can be applied, usually relieve it, also sinapisms: and, if the pain is very severe, leeches and cupping, and a few doses of calomel with opium, seldom fail to give relief. Gout may also attack the same parts, but may be diagnosed by our previous acquaintance with the habits of our patient. In both cases the pain is intermitting, changes its locality, and is felt to be external, and the health is not affected.

3. The next form belongs to the class of spinal irritation, is very frequent, and met with exclusively in females during the menstrual periods, and attacks mostly the left side of the head; the pain is intermittent, shooting and lacerating: may be fixed for days, and is most severe at the temple (when it is termed *clavus hystericus*), and next at the parietal protuberance and occiput; it proceeds from the sub-occipital nerve, and if the exit of the nerve is pressed upon, pain more or less severe is complained of, extending along the whole course, or at certain sites only of the nerve—as at the temple, nape of the neck, parietal protuberance, &c.; it is usually increased during the menstrual period, and is generally a complaint of unmarried females, between the 23d and 35th years of life, and is indubitably a form of hysteria. The menses are usually profuse or difficult, the bladder irritable, and there are ill-defined, painful sensations about the pelvis; and three forms of neuralgia coexist. The irritation of the sub-occipital nerve must be traced to the ovaries, being only present where these exist, and while capable of fulfilling the function of menstruation; and our treatment

must be primarily directed to remove any congestion, or irritation of these peculiar organs; and secondarily, to lessen the pain of the nerves. The author advises the daily use of hip-baths, or sea-bathing where possible; attention to prevent accumulation in the rectum; abstinence from stimulants; mental employments; inf. valerian c. digitalis, with pills of assafoetida: occasionally, general or local bleeding; and when these fail, a gentle mercurial action, the cold bath being during the time omitted. As local means, he recommends belladonna plasters, veratrine ointment, sinapisms, or blistering. When, however the patient is exhausted by leucorrhœa or profuse menstruation, with symptoms of chronic inflammation of the womb or ovaries, the treatment becomes more doubtful; but the author prefers the trial of a tonic treatment, and advises the exhibition of the valerianate of zinc and quinine as especially efficacious, and the sulphate of iron in infusion of valerian when there are evidences of confirmed chlorosis. This headache may be termed the *nervous* headache; it also assumes another form, which may be termed the *cutaneous* headache, and is the hemicrania of our forefathers; it seems to be located in the integuments of one half—usually the left side—of the head, which is so exquisitely sensible as scarcely to bear the least touch of the finger, and the pain never passes the mesial line.

4. Another form of headache is that arising from deficiency of blood within the cranium, and coming on after hemorrhages, exhausting discharges, or any other debilitating causes: the best examples arise in chlorosis. It is increased by the erect, diminished by the recumbent posture, is not a very painful form, but is often attended with impaired vision; its cause may be traced to diminished muscular power of the heart, which palpitates on slight exertion; there are also dyspnoea, pale face, and other symptoms of feeble circulation, with a sinking pain at the epigastrium, and craving appetite. If the true cause of this headache be mistaken, and depletion used, paralysis has been known to supervene; but if the debility be removed, the muscular power of the heart is easily increased, and the most useful remedies are, steel by itself or combined with quinine, full diet, and the recumbent posture.

5. The last form of headache alluded to by the author arises from excess of blood, and may exist as a passive or congested, or as an active or inflammatory state. The former arising from various known causes of congestion, is diagnosed by the constant heavy pain at the anterior part of the head, increased by the recumbent posture, sense of chilliness, slow, feeble pulse, tendency to vomiting, and pain in the lumbar region, caused by congestion of the spinal chord. It is a dangerous form of headache, and has, in the depressing diseases, proved fatal in a few hours; but in other cases has lasted weeks without much mischief. The treatment should be to induce reaction as soon as possible by the warm bath or an emetic. If the headache persists with hot skin, leeches to the inner nares will be found of value; applied to the temple, they debilitate without relieving the pain in the head, and they are altogether inadmissible when this co-exists with typhus or scarlatina. Blisters may also be applied, and diaphoresis produced by the usual means; cold applications to the head the author considers useless and even likely to increase the congestion. Care is also requisite that mere congestion, should not, by the usual stimuli, be forced into inflammation, which is the next stage, if resolution or fatal termination

does not take place. The author regards idiopathic phrenitis as a most rare disease, and hydrocephalus acutus as congestion not inflammation. Phrenitis is well marked by the tensive pain increased on stooping, by the bright eye, hot skin, nausea and vomiting, tendency to delirium, and occasional twitching of the muscles of the face; the most active antiphlogistic measures should be used.

There were other forms of headache easy of diagnosis, but of these the author would only mention the constant pain of the head in children, with emaciation and want of sleep, and which diagnosed tubercles of the brain. In the headaches of pregnant females, referred to the center of the head, and attended with a remarkably small pulse, and in which, if bleeding is neglected, convulsions, abortion, and too often death, are apt to supervene; and, lastly, the pain of the head occurring after a night's debauch, the cause of which, whether in the stomach or affected organ, the author considered not to have been sufficiently investigated.—*London Medical Gaz.*—*Ranking's Abstract.*

On Petit's operation (the operation without opening the sac) for Strangulated Hernia. By JAMES LUKER.

The object of the author in this communication was to place before the profession the result of his experience in operating for strangulated hernia, without opening the sac. He remarked, that though experience was the only fair test by which the relative merits of this and the ordinary operation could be decided, the subject was encompassed by many obstacles, such as the impossibility of obtaining exactly parallel cases, the importance of not mixing the observations of different surgeons, or judging from selected cases. To obviate these difficulties and sources of fallacy, the author has yielded up the whole of his experience on the subject of Petit's operation, which is the only mode of operating he has adopted since the year 1841, as an ordinary practice. Being unable to supply from his own case-book the result of cases operated on by opening the sac, the author appealed to the experience of others, referring especially to statistical details given by M. Texter, Mr. South, M. Malgaigne, and collected at the London Hospital, and from the British journals generally, which gave a return of mortality of from one-third to more than one-half. Where the taxis is successful similar statistics prove that a fatal result is very rare. The conclusion which seems naturally to flow from these facts is, that operative interference should be deferred, and the taxis pursued as long as it offers any prospect of a successful issue—an inference, however, which the author considers to be fallacious and mischievous in its tendency, as involving a ripe source of procrastination, which in itself is the too frequent cause of non-success, attending the operation. This assertion is borne out by statistical details of cases operated on at different periods, after the establishment of symptoms of strangulation. The author then proceeded to remark that the desideratum appeared to be, the introduction of an operation by which the taxis would be aided, but without incurring the risk attending the ordinary operation, by exposure of the contents of the hernial sac; and these objects he considered to be fulfilled by Petit's operation. Inclusive of selected cases occurring between 1831 and 1841, the author

stated that he had attempted the performance of Petit's operation in eighty-two instances, which, with four exceptions, likewise comprised all the cases that had come under his care since 1841. Of this number the operation was completed, without opening the sac, in fifty-seven. In twenty-five it was necessary to open the sac to complete a reduction of the hernial contents—the opening varying in extent from half an inch to one inch and a quarter. With respect to the mortality amongst these patients,—of the fifty-seven in whom the sac remained unopened, seven died; of the twenty-five in whom the sac was opened, eight died. The author considered, however, that for statistical purposes, it was preferable to exclude the selected cases, (twenty-six in number,) together with four other patients, of whom three were considered moribund at the time the operation was performed, and the fourth died from secondary stricture, six weeks afterwards. Of the remaining fifty-two patients, the sac was opened in twenty-one, of which three died, and not opened in thirty-one, of which two died. Of the cases in which the sac was opened, in ten, strangulation of the contents had existed, before the operation was performed, under twenty-four hours, of which number one died; in eight, above forty-eight hours, of which one died. Of the unopened cases, the strangulation had existed in thirteen under twenty-four hours, of which not one died; in eleven, under forty-six hours, of which one died. The author considered it important that the small size of the opening made into the sac, in the former class of cases, should be borne in mind, as it doubtless had an important influence in diminishing the ratio of mortality attached to this mode of operating. He then passed on to further details relating to the above cases and the reason for opening the sac, and stated that of the fifty-two instances cited, twenty-nine were femoral, twenty inguinal, and three were umbilical hernia. He further pointed out the conclusion, from an analysis of the foregoing cases, that Petit's operation has proved most successful in the femoral form of hernia. In cases of inguinal hernia, the author limits his incision to a longitudinal division of the skin and fascia over the neck of the sack, of which cut the seat of stricture should be the centre. He then partially incises or scarifies the neck of the sac, (if the seat of stricture, as it usually is,) so as only partially to divide it, and so that it shall yield to the subsequent application of the taxis. In femoral hernia, he considers it very desirable to avoid, as much as possible, interfering with the tumor in conducting the operation, and therefore recommends that a similar proceeding should be adopted—the centre of the perpendicular incision in this case being between the upper part of the tumour and the abdominal surface. Poupart's ligament is thus reached by carrying the finger from above downwards, and the stricture is divided on a director, introduced into the femoral ring. The operation advocated by the author is not considered by him to be so applicable in umbilical hernia, except where it is of small dimensions. The author concluded by noticing and combatting the various objections which have been raised to Petit's operation, and by insisting on its value, apart from other considerations, as holding out inducement to surgeons to proceed with less delay to the performance of the operation, as he considered that procrastination, arising from the dread of having recourse to the more severe operative interference ordinarily adopted, was in itself, (as already remarked) a ripe cause of the mortality which unhappily has too generally attended these cases.—*London Lancet.*

On the Treatment of Nursing Sore Mouth. By Dr. ELX, of Rochester, New York.

The appearance of several articles in the journals, within a comparatively recent period, on the disease familiarly known as "nursing sore mouth," naturally begets the presumption that it is becoming more prevalent and troublesome, and that anything relating to its treatment might not be unacceptable to the profession.

It is the impression with many that this is a new disease, and that nursing and pregnant women are exclusively liable to it. Such is not, however, the universal opinion of the profession. We are informed of its occurrence in other countries, and that a similar affection is found in the male sex. These points are not material for us to decide. We have thought, however, in comparing the description given of "chronic thrush," with that given by some writers of "nursing sore mouth," that if the terms were changed, the description of the disease we are considering would be improved.

A brief history of the complaint will suffice. It is generally attendant on pregnancy or lactation. Those whose blood is impoverished, or whose digestive organs are in a bad state, are especially liable to it. It is not a necessary attendant on anæmia—the worst cases of which may exist without it. Its duration is indefinite; but the change in the system which occurs on the "drying up of the milk," usually puts a stop to it. Burning in the stomach is often the first symptom—then a scalded, hot sensation in the mouth; the mucous membrane is red in patches or throughout—sometimes looks as if stained, simply, especially on the tongue; pimples and ulcers make their appearance, and become foci of inflammation; they frequently occur under the tongue, and between the lips or cheeks and the teeth. The stomach may now be relieved; but when the mouth improves, its irritation appears to be renewed, the dyspeptic symptoms varying in different cases, when on the occurrence, perhaps, of diarrhoea, a temporary relief is gained in respect to the stomach and mouth. The disease has its acute and chronic stages, the former being often attended with febrile symptoms. A diarrhoea in the chronic form of the complaint is one of the most troublesome symptoms. It occurs both during pregnancy and lactation, and in the latter state may frustrate our efforts to cure the disease without weaning the child. The exhaustion caused by diarrhoea may prove fatal; sometimes it terminates by the supervention of pulmonary symptoms. A majority of cases recover; some are very protracted, and whatever relief may be gained by treatment, unless the system can be brought into a healthy state, it is exceedingly liable to re-appear.

I have not deemed it desirable to prolong this article by introducing any matter relative to the topography of the disease, its dependence on locality, climate, &c., and kindred questions, and for the same reason forbear to speculate on its pathological characters. It only remains, then, to speak of the treatment.

Not having kept any written data, I regret my inability to furnish precise statistical information of the results of treatment. I am quite certain, however, that "our experience" has been different from that of a distinguished physician who has lately written on the subject, who has found, "that in a large proportion of cases weaning becomes necessary." (Dr. Flint, in *Buffalo Medical Journal*, Feb., 1848.) We admit this

alternative only in cases of much exhaustion, or where diarrhoea exists to severe or dangerous extent.

Our practice (it may be proper to state) has been, for the last ten years, in an "infected region." About eight years ago the disease was fast becoming an opprobrium medicorum. It was about this time that the paper of Dr. Backus, which has become a standard essay, was written, in which he says that "latterly some cases have resisted this and every other mode of treatment, and I have had to wean the child, when the disease was cured at once and did not return. The allusion is to a compound pill of aloes, rhubarb, carb. iron and ipecac, and astringent and other washes for the mouth. At this time, also, it was announced that a neighboring physician had accidentally discovered *the* specific; which proved to be powdered cubebs, in connection with bismuth, gum Arabic, &c. For the burning in the stomach the cubebs was serviceable, but the most chronic cases resisted the treatment. In March, 1841, a case occurred to me, in which delivery of twins was followed by alarming hemorrhage; this was succeeded by re-action, that sometimes attends loss of blood, during which the sore mouth made its appearance, preceded by the burning in the stomach. The ulcers were in the most sensitive part, under the tongue. All motion of the tongue was very painful, and swallowing and speaking were nearly impracticable. The treatment was that commonly supposed to be indicated, and among the local remedies nitrate of silver was employed in substance, and creosote also was freely applied. The case went on unrelieved, although the anæmic symptoms were yielding to appropriate remedies. Believing that some new remedy would be necessary, I was speculating on the probable effects of corrosive sublimate, but determined to make a trial first of the iodo-hydrargyrate of potash. A wash was tried, of sufficient strength to cause some tingling and pain on being held in the mouth, which ~~at once~~ relieved the stiffness and soreness of the tongue. A repetition of the remedy a few times changed the diseased action, and the patient had a permanent recovery. I immediately commenced using the medicine internally and locally, and was pleased to find that it might be so managed in almost every case, either by using it alone or in combination with tonics, as to afford a favorable result. I soon found, especially in chronic cases, that when taken into the stomach the mouth did not seem to require its topical use. I have continued to employ it to the present time, and with no abatement of confidence in its efficacy.

During the most active state of the buccal inflammation, it has displayed irritant effects which have contradicted its use; an over-dose on an empty stomach will nauseate; and in some cases I have found more benefit from ferruginous remedies. But notwithstanding these exceptions, it cures the disease with more certainty than any and all other remedies—and its non-salivant property renders it safe as a mercurial alternative. The solution I have used is made by dissolving ten grains each of iodide of potassium and red iodide of mercury in one ounce of rain water—dose, four to six drops three times a day. A minute quantity of this solution, applied to a diseased follicle or pimple, disposes it to heal; and if used as a wash, 6 drops may be added to one or two ounces of water.

In cases where the medicine does not agree, or where a tonic seems preferable, I have used a mixture of iodide of iron, Huxham's tincture and syrup, and a mouth wash of sulphate of copper, rose water and honey.

Where the case is attended with much or protracted *burning* in the stomach, I should prescribe tinct. muriate of iron, and saturated alcoholic tincture of cubebs, in equal proportions, fifteen to thirty drops three times a-day.

It is to be understood, in connection with the above, that no permanent immunity can be obtained from this disease, nor can even temporary benefit be rationally expected from the best treatment, without a skilful management of the whole case. This I trust will be considered before any one concludes that the medicine will not bear its recommendation.

ROCHESTER, N. Y., July 29, 1848.

W. W. ELY.

[*Boston Medical and Surgical Journal.*]

On Intoxication.—By G. CORFE, Esq., Middlesex Hospital.

[Mr. Corfe has lately given us a series of very practical articles on different subjects, many of which we shall place before our readers in due course. The first we give is "on Intoxication," to distinguish which, from cerebral diseases, is sometimes puzzling. Mr. Corfe says—]

A patient is brought into the hospital, perhaps on a policeman's stretcher, or he is carried in by friends, who state that he was picked up in the streets, senseless. His pupils are dilated, immovable; his breathing is deep and low, and heavy, the expiration being short and abrupt, whilst the inspiration is a prolonged, deep sigh, with more or less stertor: pulse is full and strong. The suspicion arises that the man has sanguineous effusion into one or both ventricles of the brain. But it must be again acknowledged that, of all the perplexing, deceitful, and varying symptoms which diseases occasionally put on, those of cerebral lesions or more cerebral disturbance are, of all others, the most difficult to decide upon. We have admitted cases into the hospital in the dead of night, brought here by policemen, who have found the patient lying senseless, or he has been seen to fall senseless on the pavement: we have bled, blistered, leeches, and purged; shaved the head, and given turpentine enemata, but all to no purpose; insensibility has remained; when, to our surprise, in twelve hours afterwards we have gone to visit our patient we have found him perfectly sensible and tolerably well, not more surprised at the loss of a head of hair, than we have been at the sudden revival of our supposed case of apoplexy. Whilst on the other hand, I have admitted a case as one of "dead drunk," perfectly inanimate, and have, for the sake of precaution, sent him into the ward to bed, and yet have found it to prove an instance of apoplexy. I have, however, learned a valuable lesson by even these difficulties: for in every instance of late years, when a case of complete insensibility is admitted, I have requested the house-surgeon to empty, and then wash out the stomach by means of the pump; and, if it has been from drunkenness, the "sot" has shown his character up before we have finished this operation; and if it has been one of apoplexy, it has done no harm, and it has proved that it was more than intoxication, as no alcoholic fetor has been detected in the contents of the stomach.

In all cases of intoxication the mental faculties become roused before the operation of thoroughly washing out the stomach by the pump is concluded; whilst, on the other hand, it may be said, the reverse is ordinarily the case

in cerebral lesions, or in mere concussions of the brain. Before we allow the tube to be withdrawn from the stomach, in cases of inebriety, we usually inject three ounces of the dilute acetate of ammonia draught, which has an extraordinary effect sometimes, in "sobering" the head, and calming the stomach too.

I am aware that it is much easier to recommend the employment of the stomach-pump than to administer it to persons who are sometimes in the highest state of excitement bordering on maniacal fury. I am anxious, therefore, to describe the mode in which we employ this remedial agent in such cases, for until I arrived at this practical method, we were often obliged to abandon the use of the pump, in consequence of the difficulties which the struggles and powerful action of the patient's body produced; and I may here remark that, on one occasion, the gag was forced from the mouth, and the man bit the tube in twain a few inches from the cylinder, leaving the remainder, nearly two feet in length, in his œsophagus and stomach, when, by the greatest manual force, I wrenched open his jaws and plunged my fingers down his throat, and was fortunate enough to seize the divided end at the point of finger and thumb just as it had slipped within the bag of pharynx. Since that period I adopted the following method:—The patient is seated in a strong wooden chair, another chair is placed behind him, and an attendant is ordered to sit in it, and taking the arms of the patient, he pinions them by holding the wrists firmly against the back of the chair. This method serves to fasten the trunk securely in the chair; the legs are then swung in a round towel, which is passed round the ankles by a noose, and a second chair being placed so that the back of it shall be towards the legs of the patient, another attendant is placed in it; he carries the towel over the back of the chair, and sits upon it, and thus the legs are at right angles with the trunk, and consequently they are almost powerless. If, however, the man offers to flex the knees, the ankles are instantly raised higher, and the power of the flexors of the thigh is thereby overcome in an instant. By this position, it will be observed, that the patient is deprived of all muscular power, and the only fixed point on which his body rests is the ischiatic tubera. I am satisfied that the stomach-tube may not only be introduced with comparative ease, but that the operation of the pump is perfectly harmless, when judiciously administered, upon a refractory patient thus immovably fixed.—*Medical Times*, Oct. 23. 1847, p. 17.—*Braithwaite's Retrospect*.

New Vehicle for holding Camphor in Solution.—Sir James Murray proposes a new vehicle for holding Camphor in solution, which may be exhibited in doses considerably greater, and with less irritation, than it has hitherto been given. It was known that camphor was insoluble in water; and that when given in almond emulsion it very readily separates on the addition of water, and that the same separation takes place on adding water to a solution of camphor in spirits of wine. The opinions respecting the effect of camphor are various. Some describe it as a stimulant, and some as a sedative; but this difference of effect depends mainly on the quantity given. Now, Sir James Murray has found that the fluid magnesia was capable of dissolving camphor to the extent of three grains to the ounce of the solution, and that adding water to the mixture did not

cause any cloudiness or separation of the camphor. An ounce of this solution contains three grains of camphor, which appears perfectly clear, like water, and if anything is added to the solution capable of withdrawing a portion of the water, such as dry common salt, a rough estimate may be formed of the quantity of camphor which it contains. To employ camphor as a sedative, it must be given in large doses; but it is also necessary to have it perfectly dissolved, for when free it acts as a powerful stimulant. It is obvious, then, that given for this purpose it would not do to employ the camphorated spirit, nor will the solution in emulsion be any better, as it readily separates from it in the stomach. We have, therefore, he observes, a menstruum in the fluid magnesia, which answers better than any method hitherto known.—*Dublin Medical Press.*

On external use of Chloroform.—In the addenda of Braithwaite's Retrospect part 17th, we find the following account of the observations of Mr. Nunneley on the external use of chloroform.—ED. BUFF. MED. JOUR.

In concluding our remarks on the use of anæsthetic agents in medicine, we cannot help adverting to some very important and novel views on this subject, brought before the branch meeting of the Provincial Association at Leeds, on June 17th, 1848, by Mr. Nunneley of that town. This gentleman stated that for many months he had been engaged in making experimental researches on those agents, with a view to ascertain, as far as possible, the modus operandi, the doses which may be borne with impunity, and the different modes of application: as well as, in cases of an overdose, the best means to be adopted to counteract it.

His experiments have not merely extended to the common anæsthetic agents employed, such as ether and chloroform, but he has been endeavoring to ascertain whether or not there may be some others, which may either be more safely administered, or may possess still greater advantages than the usual agents employed. He stated that he believed it not improbable that it would ultimately be found that all those preparations, which have a *radical basis*, (in the language of modern chemistry,) such as acetic ether, bisulphuret of carbon, aldehyde, and many others of an analogous character, upon some of which he had made extensive experiments, would be found to possess similar properties on the animal economy. He did not intend to enter on this important question generally, which he reserved for another occasion.

This much Mr. Nunneley was prepared to state, that *chloroform appeared to be the most deleterious to life*, to require the greatest care in administration, and that the boundary up to a fatal dose is by no means well-marked—that of two animals, in apparently the same condition, the same dose being given in precisely the same way to both, the one will speedily die, while the other will bear it with impunity,—that from the effects observed, he has reason to think the ultimate effects are in some respects not dissimilar to those produced by prussic acid,—that to some animals, as for instance the newt, the frog, the toad, some fish, slugs, snails, and some insects, the effects are *more* rapidly fatal than prussic acid of Scheele's strength; and that even in higher animals, when under the influence of an incomplete dose, or recovering from the effects of a large

dose of either chloroform or prussic acid, the phenomena are in many respects very similar; and further, that the numerous post mortem examinations which he has made, fully corroborated this opinion. He stated that acetic ether, with which he had made numerous experiments, possessed very considerable anæsthetic powers,—that bisulphuret of carbon also possesses to some extent similar power, and so far as his experiments go, it is very important to add, that this power is of a safe character, the animal speedily recovering.

But of all these remedies he believes that sulphuric ether will be the safest and least noxious to life. On these points Mr. Nunneley intends hereafter to lay his experiments, already very numerous and varied, before the profession. His chief object on the present occasion was to call the attention of the profession to experiments proving, as he thinks, the value and safety of a *new mode* of administering these agents.

His object on the present occasion was to show that the action of all, or most of these agents, might be produced *locally by local application*, the sensorium being unaffected, consciousness being retained, and the limbs not subjected to their influence, being unaffected. He stated that either by *immersion* in a small quantity, or by the *vapor applied* merely for a limited period, a limb may be rendered *perfectly motionless and senseless*, and what may be an additional advantage, *fixed in any desired position*. He stated that he had immersed his finger in these fluids for about half an hour and an hour, and at the end of this period the finger was nearly powerless and insensible, and that it was forty-eight hours before the effects entirely disappeared, a sensation of heat and discomfort extending along the tract of the nerves to the axilla—that before operating on a difficult case for artificial pupil, he had applied for twenty minutes a small portion of the vapor of chloroform to the eye, by means of a small jar which accurately fitted the orbit, with the effect of rendering the parts nearly insensible. The first effects of these agents when locally applied is to produce redness, heat, and smarting, which subside, followed by swelling and redness of the integuments, which remain for some time. Mr. N. stated that he could completely paralyse any limb of frogs or toads by immersion or exposure to the vapor in about five minutes or less; and he mentioned, as a curious fact, that if the exposure to the influence were continued longer than was sufficient to produce a local effect, this influence extended to the corresponding limb of the other side: thus, for instance, if one hind leg became *too much* influenced, the other hind leg partook of the same effect—if the fore leg were too much effected, then the other fore leg became so likewise, and so on throughout the whole body—a result which Mr. Nunneley mentioned as strongly corroborative of his experiments with prussic acid, as detailed in the last volume of the Provincial Transactions, and strongly supporting the opinions of Dr. Marshall Hall on “reflex action.” These views were illustrated by a series of interesting experiments before a highly respectable audience of medical men, on frogs and toads, in which, after immersion for a few minutes, the limbs became insensible, and were amputated in repeated portions without any symptoms of pain whatever.

The experiments which Mr. Nunneley performed before the meeting were perfectly successful and satisfactory; and if his views should prove to be correct, which we think very probable, they will give a new impulse to

the use of anæsthetic agents, and enable the most cautious practitioner to use them without the danger that may attend their internal administration.

He stated that by this new mode of application to the hind legs of rabbits he had been enabled to amputate the toes without the least indication of feeling—that he was not prepared to state what was the best mode of applying it, or the exact quantity to be used, which obviously can only be determined by a very lengthy series of experiments on different animals, which he is at present zealously pursuing, his principal object being to communicate the important *physiological local effects* of anæsthetic agents generally, which we believe have not hitherto been announced.

Poisoning by Arsenic—Magnesia as an Antidote.—M. Cadet-Gassicourt has related two cases of arsenical poisoning, in which hydrated magnesia was successfully administered. Both cases occurred in the practice of M. Chammartin. (*Journal de Chimie Medicale, Fevrier et Mars, 1848.*)

The subject of the first case was a lady in Paris, who, on the 27th of October, 1847, took a considerable dose of arsenic, in the form of a powder sprinkled on bread and butter. Three or four hours after this she took a cup of coffee; this brought on immediate vomiting, which recurred at intervals. Between six and seven o'clock the same evening M. Chammartin was called in, and found the patient suffering from all the symptoms of arsenical poisoning. He prescribed hydrated oxide of magnesia, of which 300 grammes (between $\mathfrak{Z}ix$ and $\mathfrak{Z}x$), were given in the course of two hours. It was followed by liquid evacuations, and the patient recovered.

The subject of the second case was a man æt. 23, of dissipated habits. Three hours after an unusually full supper he took a large dose of powdered arsenic, followed by copious draughts of water. He passed the night in great agony in the bowels and chest, but had no nausea, vomiting, or diarrhoea. At 11 A. M. the next day, M. Chammartin was sent for, and found the man in a state of great collapse, with his face pale, and his features haggard and pinched; he was agitated and spoke with a feeble voice; his respiration was difficult, and he complained of a tearing sensation along the gullet and at the epigastrium, and of thirst and dryness of the fauces. His tongue was moist, but red at the edges and point, his deglutition was easy, and there was no diarrhoea, though he suffered from colics and cramps in all his limbs. The hydrated oxide of Magnesia was then given, warmth was applied to the surface, and he was afterwards bled. He was then removed to the Hotel Dieu, where all his symptoms improved. He finally recovered. The quantity of magnesia given was about 500 grammes (about $\mathfrak{Z}xvij$), but while in the Hotel Dieu some hydrated sesquioxide of iron was administered.

The same journals contain an account of the dispute between MM. Caventon and Bussy, as to the comparative efficacy of the hydrated magnesia, and the hydrated sesquioxide of iron as antidotes to arsenic. The former advocates the superiority of the sesquioxide over the magnesia, while M. Bussy is inclined to the opposite opinion. M. Caventon says that the salt formed by the iron with the arsenic is less likely to be decomposed by the muriate of ammonia which naturally exists in the stomach and

intestines, and states that this salt readily decomposes the arsenite of magnesia, so that when the last is the antidote used, the arsenic is more liable to be reduced to a soluble state. But M. Bussy remarks that such a result is obviated by using an excess of magnesia, which again, according to M. Caventon, is apt to occasion an extrication of free ammonia, which, from its irritating properties, cannot but concur in complicating the case.

The same subject has also been investigated by M. Riégl, whose results are briefly these:—(*See Jahrbuch für Prakt. Pharm.* xiii., and *Chemical Gazette*, Aug. 1, 1847.)

The author has been enabled to detect traces of arsenic in a filtered solution, upon the application of the sesquioxide of iron, by the sulphuretted hydrogen test, wherever the quantity of the oxide was less than seven parts, but the liquid was perfectly free from all traces of the poison wherever the antidote was added in the proportion of more than ten parts. With arsenic acid at least twelve parts were required to precipitate the acid completely. With respect to the hydrate of magnesia, he found that to precipitate entirely one part of arsenious acid, at least eighteen parts of the antidote are required, and he recommends that, in preparing the magnesia, one hundred parts of the sulphate should be precipitated by fifty parts of caustic potash, and the precipitate washed and preserved in bottles under water. Moreover, the author found that the compound formed by magnesia with arsenious acid was quite insoluble in cold and boiling water. When the arsenic is in combination with alkalies, this antidote does not completely remove it from its solution, but by mixing some undecomposed magnesian salt with the hydrate of magnesia, all traces of the poison were removed. He accordingly recommends a mixture of hydrate of magnesia and sulphate in water, in equal parts, as the most advantageous form, especially when it is uncertain whether the poisoning has resulted from free arsenious acid, or some alkaline arsenite.

In preparing the magnesia for the purpose of an antidote, it is necessary according to M. Bussy, to avoid calcining too much, as highly calcined magnesia is useless.—*Bouchardat, in Nouvelle Encyclographie des Sciences Méd.* Fevrier, 1847.

Medicinal Employment of Gutta Percha.—Gutta Percha being very soluble in sulphuret of carbon, and the latter not losing any of its great volatility by the combination, M. Uytterhoeven, head surgeon of St. John's Hospital, in Brussels, is in the habit of spreading the mixture in its liquid state over parts which he is anxious to preserve from the action of air and water. Recently, an abscess resulting from caries of the ribs, after being emptied, was covered by a coat of this fluid, a small patch of court-plaster having previously been placed on the puncture. In this manner the inflammation of the parietes of the cyst was prevented, and the latter was emptied as often as accumulation of matter required. The same surgeon has employed the material, prepared in the manner mentioned above, to prevent the entrance of air into an articulation laid open by a wound. There is no doubt that chloroform might advantageously replace the sulphuret of carbon.—*Lancet*.

Colica Pictorum. By JAMES H. JOHNSON, M.D., one of the Physicians and Surgeons of the "St. Louis Hotel for Invalids."

The pathology and treatment of *Colica Pictorum*, has for many years invited the attention and excited the minds of medical men. Its diagnostic similarity to other varieties of enteritic inflammation, and spasmodic intestinal irritation, have served to mislead the profession, from what I conceive to be the true cause of the disease, and consequently has indirectly produced many errors in practice.

This article is not written with a view to explain all the physiological derangements, or abnormal appearances of the intestinal tube, but with a design to recommend a system of practice, which has proved generally successful in my hands, for a number of years, in the mining regions of northern Illinois, Wisconsin, and Iowa.

The following remarks are presented to the profession with some confidence, as the theory is based upon clinical observations, and post mortem examinations. I do not wish to assume, or claim any principle as new in Pathology, but to only insist upon the active indications of cure.

It is useless for me to enter into the general symptomatology of the disease, as every medical man is presumed to understand its peculiar and various phases.

The disease depends upon the spasmodic action of the smaller intestines; the jejunum and ilium, and frequently extends to the larger portion of the canal as far as the sigmoid flexure of the colon. I have seen gangrenous erosions, which had been treated by clever men in the profession, as cases of intussusceptio, which erosions can only be accounted for upon the principle that a compression upon the spinal marrow produces a paralysis of the peristaltic action of the intestinal canal in consequence of the sensorial fluid from some of the vertebral nerves being obstructed in its course. Hence, a change, of circulation followed by gangrene. I would invite the attention of the practitioner to the peculiar expression, and languor of the countenance of the patient. The warm chest, yet, cold extremities, the glassy eye, milk furred, yet dry-pointed tongue, which, in connection with the contraction of the abdominal muscles, the palsied and drooping hand, and contracted fingers, and faint efforts at vomiting, are the best pathognomonic symptoms of the disease.

In reference to the exciting cause, I will speak from observation, disregarding many of the opinions entertained by distinguished gentlemen of the profession. Among the smelters in the mining regions mentioned, the disease is not from an Arcinite (as has been supposed,) which is so minutely divided as to impregnate the atmosphere in the neighborhood of the furnaces. The effluvia, always laying the foundation for the disease. I will also affirm that lead, or preparations of lead, in the form of carbonate, frequently produces paralysis, general neuralgic symptoms, and in one case to knowledge, amaurosis, with all the concomitant symptoms, depending upon derangement of the cerebro-spinal axis, and that particular portion of the brain, the thalami nervorum opticorum, from which the optic nerve originates. This case was owing to the use of the "cosmetics of the shops," which is a fine preparation of the carbonate of lead.

I will here assert, that the remote cause of *Colica Pictorum*, and *Rhachialgia*, in a majority of cases, appears to be lead introduced into the

system, through the stomach, the lungs, or the skin. Hence, the disease is most frequently found in the neighborhood of the smelter's furnace, and the probability is, that the disease is more apt to occur from the fumes of the furnace, taken into the lungs, than from endermic or stomachic absorption. In the vicinity of the furnaces at Galena, animals, such as horses, oxen, pigs, and even poultry, are subject to the disease. The operative miners and citizens, generally, are under the belief that the exciting cause depends upon the water drank from the streams running below the wash dams, &c. This is a popular error—pure water does not act upon the sulphuret of lead, consequently it is harmless. But lead is easily disintegrated and reduced to an oxyde, in the process of smelting, and exists in the atmosphere; thus, we may readily conceive why man and beast are alike subject to the same disorder. Spring or river water is incapable of decomposing the sulphuret of lead in sufficient abundance to form either an oxyde or any of the salts that would prove injurious to health.

Another error exists, not only in the minds of the people, but frequently with the practitioner, "that fatty, or oily food is a preventive and cure of the disease,"—as a prophylactic, it may be of service, but as remedial agents, none of the oleaginous preparations can be depended upon.

It is true, these agents may be indirectly serviceable in ordinary cases, but the direct indications of cure are more active. My practice is laid on the firm and solid foundation of experience and observation—an experience of several years—with every opportunity of close investigation, so far as regards the pathology of the disease, and the beneficial results derived from the following treatment:

In the first place, counteract by all possible means the intestinal spasm; this is best done by large doses of proto. chl. hyd. and opium, say from 30 to 50 gra. of the former combined with from 2 to 5 gra. of the latter, to be repeated at least once in three hours. In some cases opium may be given much oftener, as no idiosyncrasy ever occurs in cases of colica pictonum. In two hours after the last dose of calomel and opium, give from 2 to 4oz. of ol. ricini combined with from 4 to 5 gtt. of ol. tigllii. Generally, in a few minutes, a copious and free evacuation will take place; if not, then commence injections, not a pint, or a quart, nor a gallon, but enough to distend the bowels. It sometimes may require a large quantity of fluid—but continue; the object is, or should be distension—nature then will perform her function. Many eminent practitioners prescribe injections for the purpose of softening the intestinal fecal matter, and for increasing the peristaltic motion of the bowels. The true principle in colica pictonum is to *distend*, and consequently to remove the intestinal spasm.

In a mild degree, and under the best therapeutic plan, the disease can seldom be removed under four or five days, but if it be neglected or maltreated, it may continue for weeks, months, or even years, and then will terminate either in palsy of the upper extremities, depending, as before remarked, upon derangement of the cerebro spinal axis, partial, or complete amaurosis, deafness, delirium, or epileptic fits, and thus continue until death closes the eyes of the sufferer.

After the primary practice recommended, as a neutralizing agent, I would mention the use of the sulphureted hydrogen gas. I have used it in many cases with decided advantage, and in fact, believe it to be the only remedy worthy the attention of the practitioner, in such forms of diseased

action, where the patient is not at once restored to comparative health, subsequent to the acute attack passing off.

It should be used in the form of a lemonade, the patient drinking from three to five common sized tumblers full every day. I am indebted to Dr. Henry King, a practical and scientific chemist of this city, for the following formula, which he considers the most easy and convenient method of preparing, as all the materials are within the reach of every physician, either in town or country.

Prepare *sulphuret of iron* by rubbing a stick of sulphur on a hot bar of iron, and collect the metal materials, or by mixing flour of sulphur and iron filings, in the proportions of sixteen ounces of the latter with ten and a half of the former, and fusing them together in an earthen crucible. This should be done by putting the mixed materials into the crucible in small portions at a time, and allowing that which has been thrown in to become red hot before another portion is added.

Add diluted sulphuric acid with about four times its volume of water, and allow it to cool. Place a small quantity of the sulphuret in a vial or bottle with a cork perforated with a small glass tube bent into the form of a syphon. When the gas begins to be disengaged, insert the free end of the glass tube into a vessel of water, which will soon become saturated with the gas. If it be desirable to keep the water for some time, this operation should be performed in four or eight ounce vials, which should be subsequently carefully corked and inverted.

Sulphureted hydrogen water may also be made by placing the sulphuret of iron and diluted acid in a large bottle, and adding water until the whole is largely diluted. But in this case a portion of the salt formed (sulphate of the prot-oxide of iron,) will be dissolved in the fluid.

The diluted sulphuric acid is a valuable remedy in cases where the sulphureted hydrogen cannot be made or procured. Give it in large doses, repeated several times a day.—*St. Louis Medical and Surgical Journal.*

The Jerks.—A singular nervous affection has, at times, appeared in some parts of our Western country, analagous to that described by Hecker, in his work on the "Epidemics of the Middle Ages," under the name of "Tarantula," or "Dancing Mania." As the disease is said to be met with occasionally, no apology will be needed for copying from the Ohio Historical Collections, the following graphic description of it:

"In 1803, Austinburgh, Morgan and Harpersfield, experienced a revival of religion, by which about thirty-five from those places united with the church at Austinburgh. This revival was attended with the phenomena of "*bodily exercise*," then common in the West. They have been classified by a clerical writer, as, 1st, the *falling exercises*; 2nd, the *jerking exercises*; 3d, the *rolling exercises*; 4th, the *running exercises*; 5th, the *dancing exercises*; 6th, the *barking exercises*; 7th, the *visions and trances*. We make room for an extract from his account of the second of the series, which sufficiently characterizes the remainder.

"It was familiarly called the *jerks*, and the first recorded instance of its occurrence was in East Tennessee, where several hundred, of both sexes, were seized with this strange and involuntary contortion. The subject was

instantaneously seized with spasms or convulsions in every muscle, nerve and tendon. His head was thrown or jerked from side to side with such rapidity that it was impossible to distinguish his visage; and the most lively fears were awakened lest he should dislocate his neck, or dash out his brains. His body partook of the same impulse, and was hurried on by like jerks, over every obstacle, fallen trunks of trees, or in a church, over pews and benches, apparently to the most imminent danger of being bruised or mangled. It was useless to attempt to hold or restrain him, and the paroxysm was permitted gradually to exhaust itself. An additional motive for leaving him to himself, was the superstitious notion that all attempts at restraint, was resisting the Spirit of God.

"The first form in which these spasmodic contractions made their appearance, was that of a simple jerking of the arms from the elbows downwards. The jerk was very quick and sudden, and followed with short intervals. This was the simplest and most common form, but the convulsive motion was not confined to the arms—it extended, in many instances, to other parts of the body. When the joint of the neck was affected, the head was thrown backward and forward with a celerity frightful to behold, and which was impossible to be imitated by persons who were not under the same stimulus. The bosom heaved, the countenance was disgustingly distorted, and the spectators were alarmed lest the neck should be broken. When the hair was long, it was shaken with such quickness, backward and forward, as to crack and snap like the lash of a whip. Sometimes the muscles of the back were affected, and the patient was thrown down on the ground, when his contortions for some time resembled those of a live fish, cast from its native element upon the land."

The most graphic description we have, is from one who was not only an eye-witness, but an apologist. He says: "Nothing in nature could better represent this strange and unaccountable operation, than for one to goad another, alternately on every side, with a piece of red hot iron. The exercise commonly began in the head, which would fly backward and forward, and from side to side, with a quick jolt, which the person would naturally labor to suppress, but in vain; and the more any one labored to stay himself and be sober, the more he staggered and the more his twitchings increased. He must necessarily go as he was inclined, whether with a violent dash on the ground, and bounce from place to place like a foot-ball, or hop round with limbs or trunk twitching or jolting in every direction, as if they must inevitably fly asunder. And how such could escape without injury, was no small wonder among spectators. By this strange operation, the human form was completely so transformed and disfigured, as to lose every trace of its natural appearance. Sometimes the head would be twitching right and left, to a half round, with such velocity, and in the quick progressive jerk, it would seem as if the person was transmitted into some other species of creatures. Head-dresses were of but little account among the female jerkers. Even handkerchiefs bound tight round the head would be flirled off almost with the first twitch, and the hair put in the utmost confusion:—this was a very great inconvenience, to redress which, the generality were shorn, though directly contrary to their confession of faith. Such as were seized with the jerks, were wrested at once, not only from under their own government, but that of every one else, so that it was dangerous to attempt confining them or touching them

in any manner, to whatever danger they were exposed, yet few were hurt, except it were such as rebelled against the operation, through wilful and deliberate enmity, and refused to comply with the injunctions which it came to enforce.

"From the universal testimony of those who have described these spasms, they appear to have been wholly involuntary. This remark is applicable also to all the other bodily exercises. What demonstrates satisfactorily their involuntary nature is, not only that, as above stated, the twitchings prevail in spite of resistance, and even more for attempts to suppress them; but that wicked men would be seized with them while sedulously guarding against an attack, and cursing every jerk when made. Travellers on their journey, and laborers at their daily work, were also liable to them."—*New York Journal of Medicine*.

On the Ethereal Solution of Gun Cotton. By EDWARD PARRISH and W. W. D. LIVERMORE.

We select the portion of an article bearing the above heading, which relates to the mode of preparing the ethereal solution of gun cotton for surgical purposes.—*ED. BUFF. MED. JOUR.*

"The discussion, as to priority of discovery, has been continued in several subsequent numbers of the same Journal.* On the merits of this discovery, we have nothing to say, nor do the numerous uses of this solution in surgical practice fall within the sphere of our investigation. What particularly concerns us as pharmacologists is its mode of preparation, and upon this subject, both the writers referred to have left us in the dark. As soon as a demand was created for the article, Dr. Maynard's formula for preparing it was placed in the hands of Maynard & Noyes, Druggists, Boston, who commenced the manufacture of it on a large scale, and measures were taken to introduce it in this city and elsewhere. As it became extensively known and esteemed among physicians and surgeons, of course a number of chemists attempted its preparation. This has been attended with varying success from ignorance of the precautions necessary to be observed, and from the absence of correct formula.

The following observations are the result of a series of experiments in making the solution which have several times disappointed us: as far as they go, they are freely offered for the benefit of others who may be disposed to attempt it.

1st. Ordinary commercial gun cotton is not soluble in ether.

2nd. The best formula that we have tried for the preparation of this solution, is as follows:

Take of Nitric acid, sp. gr. 1.452,

Sulphuric acid, (Commercial) each, 1 fluid ounce,

Cleansed and bleached cotton, 2 drams.

Thoroughly saturate the cotton with the acids, and macerate for twelve hours. Then wash the cotton, dry it rapidly by artificial heat, in the shade, and dissolve it in

Sulphuric ether, one and a half pints.

*The Boston Med. & Surg. Journal.

3d. Gun cotton as thus prepared, will lose its solubility entirely, by being kept a few days, or particularly by being exposed to the sun's rays.

4th. The gun cotton prepared, as above, is entirely soluble in the officinal sulphuric ether, though not in the hydrate ether or letheon.

5th. As many groundless objections to the solution are due to its being carelessly or improperly applied, care should be taken to saturate the fabric used in making the plaster with the liquid, and allow it to dry while in close contact with the skin, and where a permanent plaster is required, it is well to apply it over the exterior surface with a brush. When thus applied, a piece of muslin one inch in breadth, and applied over a surface of an inch and a half in length, will sustain a weight of ten pounds, its adhesion not being affected by moisture or temperature.

6th. Some solutions of cotton, though resembling the true *cellodion* in appearance, are found to produce a plaster of inferior adhesive power, and which ceases to adhere on being moistened. Such specimens yield a white precipitate upon drying, which appears to be due to the presence of water. The residue, after the evaporation of the best specimens, is nearly transparent in thin sheets, having somewhat the appearance of tissue paper, and is not readily inflammable.—*American Journal of Pharmacy*.

Narcotic Necessaries of Life.—We quote the following from the *Dublin Medical Press*:—EDITOR BUFF. JOUR.

The following extract verifies our repeated predictions as to the ultimate effects to be expected from unrestricted indulgence in stimulants and narcotics:—

"**OPIMUM-EATING IN ENGLAND.**—From the accounts of the Board of Trade, of the imports and exports of the united kingdom for the month ending May 5th, it would appear that the consumption of opium in this country is greatly on the increase. The quantity imported during the month amounted to no less than 7,029 pounds to 3,083 pounds imported during the same period in 1847. The total quantity of opium imported in 1847 amounted to 24,929 pounds. It is reported that the inmates of our workhouses are given to the practice of opium-eating; and the spreading of the so-called temperance principles may have tended to increase the demand of the drug."

Twenty-five thousand pounds of opium consumed in one year, in addition to a very liberal supply of alcohol in various forms, tobacco, hops, and other soothing appliances, is no small allowance! We speak of opium-eating now as a reproach; but was not tobacco-smoking a reproach, amongst Irish gentlemen, at least, some five-and-twenty or thirty years ago? It is not for us to attempt to correct this propensity to the enjoyment of narcotics in the world at large; we conclude that those who resort to them consider the relief of mental uneasiness by such means as justifiable as the relief of bodily pain by a similar method; all we consider ourselves called upon to allude to in connexion with the subject is the indulgence in the practice by medical students, amongst whom, as indeed amongst others at the same time of life, it is liable to degenerate into a dangerous vice. We express not merely our own opinions, but those of

every man of right feeling engaged in the instruction of candidates for a place in our profession, that indulgence in the use of tobacco has had the most injurious effect in the medical schools. We do not mean to say that it leads universally, or perhaps generally, to habits of intemperance, or that it is the primary cause of delirium tremens in all cases, but we venture to assert that it is the fertile source of those evils. Tobacco-smoking leads to tipping, tipping to drunkenness, drunkenness to prostration of the intellectual faculties and every species of mental infirmity and derangement. Hence, as we believe, the deterioration of our medical schools, and the decline of that spirit of emulation which formerly pervaded them. We will not venture to follow up this tracing of disease to its remote cause, because people may think we are only indulging in a little concealed irony, but satisfy ourselves by appending the following extract by way of illustration:—

"HYPOCHONDRIA POLITICA IN GERMANY.—Dr. Brück, of Osnaburg, has just published, in Casper's *Wochenschrift*, a very interesting paper under the above title. The doctor gives a vivid description of the morbid effects of the recent violent political commotions in Prussia on a considerable portion of the population, which he contends had been previously the subjects of a kind of epidemic anæmia. In such constitutions late events had engendered a hypochondria nervosa, the result of the reflex action of violent emotions on different parts of the economy. The principal symptoms were, great paleness, anxious countenance, restlessness, and the skin inclined to constant moisture; cold extremities, diarrhoea, thirst, and white tongue. Appetite bad, except when excited by a stimulating diet; propensity for ardent spirits; copious discharge of pale urine in women, stoppage of the menstrual flux, increase of fluor albus, want of sleep, oppressive dreams, and general emaciation. Dr. Brück adds a few reflections, among which we extract the following: 'Twenty-one years ago, I mentioned, in a memoir on psychical medicine, that the numerous cases of hypochondria in our country among the higher and middle classes, were mainly owing to the want of interest in public affairs, and the total absence of coöperation between the citizens and the state. It is now evident that I was right, for the peculiar effects which the late political changes have produced, and from the nervousness with which we watch the events, prove that we have become more or less hypochondriacal. We are afraid of public life; all news of a political nature, which, amongst more advanced nations, are quietly discussed, has with us an immediate effect on the ganglionic system, frightens and unnerves us; the appetite disappears, sleep is disturbed, and the train of symptoms above mentioned make their appearance.'"

Political Distinction of Medical Men.—About thirty members of the National Assembly of France are physicians: of these M. Buchez, a distinguished writer, was the first President, M. Recurt, Vice President, and M. Trélat, Minister of Public Works.

In Prussia, ten physicians have been elected to the National Assembly recently organized; and in Italy, the Pope has appointed the celebrated Italian physician Farni, Under Secretary of State for the papal territories.

—*Medical Examiner.*

Spontaneous Human Combustion.—The "Gazette Médicale" quotes from the "Union Médicale" the following case of alleged spontaneous combustion. On the morning of the 6th of January, 1847, the body of a man named Ch—— was found on fire in bed. A dense smoke filled the room. One who was present affirmed that he saw on the body of the deceased, a small, lambent, whitish flame. All the bedclothes and clothes of the deceased were almost entirely destroyed. The bedstead was only partly burnt; there were no ashes, and very little vegetable charcoal, but some portions of animal charcoal having evidently belonged to the articulations. The other materials surrounding the body were scorched. It is said that M. C—— carried in his waistcoat pocket some chemical matches, and in the evening he had, as usual, placed at his feet a heated brick, which, before being wrapped in linen, had been slowly cooled by water thrown over it twice. He went to his room between six and seven o'clock in the evening. Two hours later, his son and daughter-in-law, passing his door, perceived nothing unusual; and it was not till the next morning, that his grandson found him in the state which we have described. He was 71 years of age, and was neither very fat, nor given to drunkenness. The weather had been very cold for some time, but there were no signs of an excess of atmospheric electricity. The body was found in its usual position during sleep. His son and daughter were suspected of having first murdered him, and then burnt the body, in order to conceal all traces of the crime. Dr. Masson, who was ordered by the authorities to make the necessary examination, had the body exhumed. The coffin was found half filled. The body was folded in a white shroud. A cravat, nearly destroyed by the fire, and a fragment of a shirt collar, remained round the neck. The hands, burnt to a cinder, were attached to the forearm merely by some carbonized tendons, which gave way at the least touch. Lastly, the thighs were so completely separated, that, had it not been for fragments of animal charcoal, the separation might have been attributed to a knife.

From the examination of these facts, it was concluded that, as it was impossible to attribute the phenomena to the action of the combustibles with which the body had been in contact, they must be ascribed to a cause inherent in the individual, put in action, perhaps, by the heat of the brick applied to the feet, but which must have found a fuel in the tissues which it destroyed; that, in a word, it must be classed among cases of spontaneous combustion. This opinion of M. Masson being fully confirmed by that of M. Orfila, the accused were acquitted.

EDITORIAL DEPARTMENT.

Asylums for the Insane.—The progress of Civilization is, perhaps, in no department of philanthropic effort more conspicuously displayed, than in measures adopted for the relief of our fellow beings afflicted with that most terrible of all dispensations—insanity. It is not long since society recognized no other duty with regard to these unfortunates, than its own tranquility and protection; and, so that they were prevented from annoying or injuring others, their condition was considered of but little moment. With this single aim, they were confined, frequently secured by chains, and in every respect treated with less consideration than those by whose rational, voluntary misdeeds, the laws of society had been infringed. The situation of the felon was far more comfortable than that of the lunatic. The name of *mad house*, was associated with deprivations and cruelties greater than were attached to the idea of the jail or prison; so that if a sane man, half a century ago, had been compelled to elect between Newgate or Bedlam, (names which are classical in English literature,) he would have had no hesitancy in preferring the former to the latter.

A new era in the management of the insane may be dated from the time the illustrious Pinel removed the fetters from the madmen within the walls of the *Bicetre*, of Paris. Then commenced the recognition of the claims of this unfortunate class upon society for comfortable accommodations, humane treatment, and measures better calculated to effect restoration. On comparing the well-regulated Asylums of the present day, with the mad houses of former days, the contrast is so great, that it may with propriety be said to denote a revolution, rather than a reformation. Our country has not been backward in this field of philanthropy. Some of our institutions are probably not excelled by those of any country. All that talent, experience and zeal, aided by ample pecuniary resources, can accomplish, appears to be realized in the more distinguished of the Insane Asylums of the United States. We are by no means, however, justified in asserting that the requisitions of humanity with respect to the Insane, are universally and completely fulfilled in our country. In some sections, Asylums have never been established, and in other sections they are inadequate, in number, or size. Many Institutions are compelled to reject the incurably insane, their accommodations being insufficient, if they are received, for those cases

in which a cure may be hoped for, and the latter, under such circumstances, very properly having precedence. It is needless to say that the former should be provided for. There are, as we learn from an editorial article in the last number of the *Journal of Insanity*, published at Utica, N. Y., about thirty Institutions in the United States. This embraces fifteen State Institutions, the remainder being made up of corporate Institutions established by philanthropic individuals, private Asylums, and departments for the Insane connected with alms houses, or general hospitals. These Institutions are, nearly all of them, full; and the aggregate number of inmates amounts to 4,711. In so far as statistics authorize a calculation of the number of Insane persons in the United States, exclusive of Idiots, the above number of patients already provided for, falls short of one half of the number of those who claim the advantages of public Institutions. Constant progress, as we learn from the article just referred to, is being made in the establishment of new Institutions, and in extending the accommodations of those already established. In Illinois, Louisiana and Missouri, State Institutions are soon to go into operation. Pennsylvania and Tennessee have also recently appropriated large sums for this object. The time must arrive, and, as we trust, ere long, when the absence or insufficiency of Asylums will furnish no excuse for this class of unfortunates being confined, as heretofore, (and now to some extent), in cellars, out-houses and jails, in any section of our country.

The establishment of Asylums is, of course, the first point. Of their propriety and usefulness there can be no question. As regards their construction, and organization, there may be many points which admit of discussion. We do not, however, propose, nor are we prepared to engage in any inquiries, at present, concerning these points. We would simply remark, that there seems to be a tendency to enlarge Insane Establishments to an extent, which, as it seems to us, cannot but compromise, in no small degree, their usefulness. We will not pretend to state any exact limitations of magnitude which should be adhered to in all instances, but, it seems to us very clear, that the individualities of each case cannot be so well studied, and managed, by the Physician of an Institution embracing several hundred patients, as if his attention were divided among a fewer number of cases. It is true, the Physician may be aided in his duties by assistants, but the latter are generally young, and comparatively inexperienced, and it may rationally be claimed, that every patient shall have the benefit of the abilities of the Physician in chief, whose position implies peculiar qualifications. In most Institutions the Physician is also general Superintendent of

the Establishment. This imposes a multiplicity of duties not strictly medical, which, if the Institution be very extensive, must necessarily encroach on the time and thought, which it were better should be exclusively devoted to the mental and physical condition of the patients. While it undoubtedly is important that the medical officer should be empowered to exercise complete control over all the affairs of the Institution, it is also important that he should be relieved, as much as possible, of all drudgery disconnected from his professional duties.

The perfection of the medical and moral management of the Insane, we imagine, can only be realized in private retreats, where the number of patients is very few, and the Physician can more effectually investigate the peculiarities of each case, and adapt his remedies and his discipline accordingly. Few, however, can afford to pay for such exclusive attentions, and, hence, for the mass of Insane, public Asylums are indispensable.

The most prominent of modern measures of relief for the insane, are the greater number, and the greater commodiousness of institutions for their reception. But it is in the principles upon which these institutions are conducted—in other words, the principles upon which insanity is treated, that we find the most striking evidences of that contrast, which, as we have said, denotes a revolution in this province of medical philanthropy. As the more important of the changes referred to, without dwelling upon the subject, we may enumerate:—the abolition of all harsh measures, such as seclusion, corporeal punishment, restraint, or coercive measures, substituting therefor, indulgence of personal liberty within certain limits, and uniform kindness in the intercourse between the patients and their attendants; mental and physical occupation in agricultural and mechanical employments, and, to a certain extent, in intellectual and educational pursuits; amusements; religious influences—these relate to the principles of moral management. As respects strictly medical treatment, the difference between the present and past appears to consist, not so much in the application of new remedies, or principles of therapeutics, as in the more sparing use of powerful agents, or, in other words, a nicer discrimination in their employment. In the latter point of view, the improvement in the treatment of insanity, corresponds with the improvement in therapeutics as applicable to diseases generally.

Much interesting and useful information is communicated to the profession, and the public, concerning the treatment of insanity, and the various subjects entering into its pathology, ætiology and history, by means of the annual reports emanating from the different institutions of our country.

Our design in commencing this article, was to notice, briefly, some of these reports which have been received by us within the last few months. By indulging in some prefatory remarks, we have been betrayed already into nearly as many words as we had intended the whole article should have embraced. The objects of these reports are, in the first place, to give an account of the particular institutions from which they emanate, and, next, to contribute statistical, and other facts relating to any, and all of the subjects appertaining to insanity. A collection of them extending over a series of years, must contain data for valuable deductions. We should be glad to see a similar plan generally adopted by the medical officers of general hospitals, alms-houses, &c. In this way, as it seems to us, our medical literature would be enriched by periodical contributions, the continuance of which, and also their constant improvement, would be likely to be secured by a healthful spirit of emulation.

The substance of the reports which we shall proceed to notice, cannot be presented, however much condensed, without occupying more space than it would be proper to devote to this collateral branch of medical science. Such a synopsis is the less called for, from the fact that the reports themselves have a pretty extended circulation, and are probably in the hands of many of our readers. We shall content ourselves with giving a very brief summary of some of the more prominent items of intelligence appertaining to each institution.

We take up first, the "*Fifth Annual Report of the Managers of the State Lunatic Asylum,*" at Utica, N. Y. The capacity of this asylum will appear from the following extracts from the report:—

"The main edifice, the erection of which was commenced in 1839, and finished in 1842, is 550 feet in length, the centre part of 120 feet front, four stories high, and the wings three stories, exclusive of the basement.

"It is built of hewn stone, in the Doric style of architecture, the portico in front being supported by six fluted columns, built of blocks of the same stone, eight feet diameter at the base, and forty-eight feet in height.

"Connected with, and in rear of the main building are two buildings of brick, three stories high, exclusive of the basement, extending back at right angles with the wings of the front building, two hundred and forty feet, and the rear of these buildings is connected by two buildings parallel with the front, one hundred and forty-six feet each, twenty-five feet wide and two stories high, thus forming an enclosed yard in the rear 215 by 292 feet.

"There are in all, 380 single rooms for patients, 24 for their attendants, 20 associated dormitories that will accommodate from five to twelve persons each, 16 parlors or day rooms, 12 rooms for dining, 24 for bathing, and as many for clothes, and the same number for water closets."

The price charged for patients supported by towns or counties is \$2 per week, and for patients supported by their own property, or by their friends, \$2.50 to \$4 per week.

As medical men are often applied to for information respecting the course required for transferring patients in indigent circumstances to the asylum, we quote the following extract, containing the statute on this subject, for the convenience of those of our readers who reside in this state:—

“By the 26th section of the act to organize the asylum, (chap. 135 of laws of 1842,) it is provided that when a person in indigent circumstances, not a pauper, *becomes* insane, application may be made in his behalf to the first judge of the county where he resides, and the said judge shall call two respectable physicians as witnesses, and fully investigate the facts of the case, and if the judge certifies that satisfactory proof has been adduced showing him insane, and his estate insufficient to support him under the visitation of insanity, he shall be admitted into the asylum and supported there at the expense of the county, until he shall be restored to soundness of mind, if effected in two years.”

The number of inmates (patients) in this institution, for the year ending November 30th, 1847, was 802. Of this number, 428 were admitted during the year, the balance remaining at the close of the preceding year. The superintendent states, that the number admitted during the year is greater than were “ever received in one year into any other institution exclusively devoted to the reception of the insane of both sexes.”

The superintendent advises not to remove patients to the asylum too early after the first manifestations of insanity. It may prove a transient affection, and at its early stage, is apt to be connected with conditions of the system which are aggravated by the journey to the asylum. He states that patients are sometimes brought to the asylum, suffering from inflammation of the brain, which had been mistaken for mere insanity. He remarks that bleeding in cases of insanity is “generally improper, and frequently very injurious.”

The medical officers of this institution consist of the superintendent, two assistant physicians, and two apothecaries, the latter being either Physicians or Students of medicine. Dr. Amariah Brigham, the superintendent, is well known to all our readers as a gentleman eminently fitted for the responsible position which he occupies.

It will readily be conceived that the duties which devolve upon the head of such a mammoth institution must be immense, and could hardly fail to prove too onerous for health, as has been the case. We learn by a late number of the Journal of Insanity, that Dr. B. has recently devoted a few weeks to travelling, by which we trust, his health has been restored

We need not add, after what has been already remarked, that we doubt the policy of gathering so many patients in one institution. A proposition to establish an asylum in the western portion of the State, has been for two or three years before the Legislature, and we trust it will soon be acted upon. By drawing away a portion of the inmates of the Utica asylum, the usefulness of the latter institution would be enhanced, and further accommodations for lunatics (which are needed) afforded, which would be more accessible to patients in Western New York.

Dr. Brigham, in addition to his other duties, is editor of the "American Journal of Insanity," a quarterly publication, printed at the asylum, for which every practitioner of medicine would do well to subscribe. We believe this is the first, and only periodical in the English tongue devoted to the subject of insanity.

"*Twenty-seventh Annual Report of the Bloomingdale Asylum for the Insane.* By PLINY EARLE, M. D., Physician to the Asylum."—The number of persons admitted into this institution during the year, was 143. Thirteen of these were cases of delirium tremens and habitual inebriety, leaving, as cases of insanity proper, 130. At the commencement of the year there were 131 patients, at its close there were 145. Of 116 patients discharged during the year, 58 were cured, 17 much improved, 23 improved, and 18 unimproved. The number of deaths was thirteen. The moral treatment here, as in other modern well regulated establishments, embraces manual labor, religious worship, recreative exercises, amusements, and instructions by means of schools, lectures and library.

The report contains a meteorological register for the year. We have also received a pamphlet of 136 pages entitled "*History, Description and Statistics of the Bloomingdale Asylum for the Insane.* By PLINY EARLE, M. D., etc.," which, to those interested in researches connected with the subject of insanity, must prove a highly interesting and valuable publication. After giving an account of the rise and progress of the Asylum, and the principles upon which it is conducted, Dr. Earle submits results of an analysis of the cases from 1821 to 1844, as regards a variety of points connected with the subject of insanity. Dr. Earle is zealously devoted to scientific investigations bearing on this subject, and in addition to this memoir, has contributed several valuable papers, of late, for different medical periodicals.

The Bloomingdale Asylum is a branch of the New York Hospital. It was originally sustained by private benevolence, but for many years, as now, is supported chiefly by the State. It is located within the limits of

the municipal jurisdiction of the city of New York, near the banks of the Hudson river, and embraces a farm of fifty-five acres.

In addition to the asylums at Utica and Bloomingdale, the State of New York contains four institutions for the insane. The New York City Asylum, at Blackwell's Island, is a city institution, and receives pauper lunatics from the city of New York. The condition of this asylum was severely commented upon by the convention of Superintendents of insane asylums recently assembled at New York. We learn that measures are in progress for its improvement. This asylum contained in August, 1847, 417 patients.

Queen's County (Flat Bush) Asylum contained, at the same date, 70 patients. We presume this is a county institution. The remaining asylums are private institutions, one situated at Hudson, N. Y., under charge of Dr. White, containing, at the same date as above, 20 patients; the other, under charge of Dr. Macdonald, situated at, or near New York, containing 30 patients.

"Thus," to quote the language of Dr. Earle, "more than one thousand one hundred of the insane are now provided for at the institutions within the State; and, yet, the wants of the community are not fully supplied."

Fifteenth Annual Report of the Trustees of the State Lunatic Hospital at Worcester, Massachusetts, Dec., 1847.—In this report the history of every case is exhibited in a tabular form, showing age, sex, civil condition, supposed cause, time of admission and discharge, etc.

The institution has provided for 607 patients during the year. Of this number, 367 were remaining at the close of preceding year, and 394 were remaining at the date of this report. 240 were admitted during the year. Of the 213 who left the hospital during the year, "103 had recovered, and were able, on their return to their homes, to renew their former duties of life, and station in society. Twenty three were convalescent when they were taken away, some of whom, we believe, have since fully recovered. Pecuniary considerations have led towns and individuals to procure the removal of forty three, most of whom would probably not have recovered, had they remained. Thirty have died.

"The hospital has been in a crowded condition every day for the past year.

The established rate for board is two dollars and fifty cents per week."

We quote the following paragraph of the report:—

"Massachusetts has done more for its citizens, in this department of benevolence, than any other portion of this country. More than one in a thousand of her population are provided for, in public and private hospitals

for the insane. It is safe to predict, that an accurate census of the insane and idiots, who are incapable of taking care of themselves, would show that they were as many as four to every thousand of the inhabitants of the Commonwealth. And such, too, I believe to be the melancholy fact in regard to their proportion in the neighboring states.'

This report contains a register of the weather for the year.

Dr. Chandler, the able superintendent, recommends that patients be not brought to the Asylum earlier than the third or fourth week from the commencement of the insane attack, in order to avoid the introduction of cases of disease in which insanity is only one of the symptoms, which, in such cases, often subsides when the disease terminates. He states that "six months is about the average time that it takes patients to recover from insanity."

"*Report of the Eastern Asylum in the city of Williamsburgh, Virginia, 1847.*"—This report embraces a period of nine months from Jan. 1847. The number of patients on the 12th of January was 140. During the period of nine months, forty-three patients were admitted. The number of discharges is 12, all except two being cases of recovery. Seven deaths occurred. Number of patients at the time of the report, 184.

Dr. John M. Galt, author of a learned work on insanity, is superintendent of this Institution. Like most other asylums this is crowded, and an increase in its capacity is asked for. Dr. G. discusses the advantages and disadvantages of large institutions, and expresses an opinion adverse to the policy of making them very large. He thinks, however, the accommodations at the Eastern Asylum may be enlarged to some extent, without impairing its usefulness.

Dr. Galt's experience is opposed to bleeding in insanity. We quote the following paragraph relating to that point:

"We observe by the papers accompanying patients when brought to this institution, that bleeding is still a measure employed in insanity, by some physicians of Virginia. In the patients received here, depletion of any kind seems rarely, if ever requisite. The medical attendant of one of the cases admitted recently, remarks in his testimony at the time of her committal, that blood-letting was employed but once, and "with very apparent disadvantage." In numerous instances on the other hand, a tonic or strengthening mode of treatment is evidently demanded. Perhaps of all medicines administered here with this end, most use is made of the Thoroughwort, (*Fupatorium perfoliatum*) an indigenous plant. We have large quantities of it gathered every year."

"*The Fifth Annual Report of the Mount Hope Institution near Baltimore, for the year 1847.* By WILLIAM H. STOKES, M. D.—This report contains a register exhibiting the general history of each patient. The

whole number of patients in the asylum during the year, was 128. Of these, 56 were remaining at the close of the preceding year, 72 admitted, and 54 remaining at the time of the report.

Cases of *mania a potu* are excluded from the foregoing enumeration.

Of the 72 cases discharged during the year, 35 were recovered, 27 were prematurely removed, contrary to the advice and without the consent of the physician, 8 eloped, 7 died. Dr. Stokes comments upon the evils of premature removals from asylums, a subject on which the experience of all superintendents is united. The per centage of recoveries in this institution is very large, (71.4 per cent on average number,) and the per centage of deaths is also extremely low, (2 per cent on average number.) Dr. Stokes adduces the average per centage of recoveries, and deaths, of fifteen asylums, Mount Hope taking precedence in each. This speaks well for the Mount Hope Asylum, although there is much truth in the following remark by Dr. Brigham: "The management of an establishment for the insane where but few are annually received, and those few for the most part incurable, is necessarily different from that required where the reception of new cases is very large. Hence the uselessness of comparing results of treatment."

Dr. Stokes attributes the superior success of the treatment of insanity in the Mount Hope Asylum to the efforts of the Sisters of Charity, by whom, in connection with superintendent, the institution is conducted. We quote his remarks on this subject:

"In an establishment for the insane every regulation, every action, the spirit of every remark, almost every look may be invested with remedial power, or be pregnant with mischief. In fact nothing is trifling, nothing is wholly destitute of effect, for good or evil, in a house full of infirm and irritable minds. The deportment of those in habitual attendance upon them, their manner, their tone of voice, may all sensibly affect the sensitive organizations for the relief of which the whole institution is designed. High as we regard medical treatment, we still feel satisfied, that kind looks, and little acts of attention, denoting a real sympathy for them, are often more efficacious than medical prescriptions. The latter without the former must prove unavailing. Hence we believe that the greatest amount of good is achieved, not in institutions presenting the most imposing and expensive architectural arrangements, or in which heroic remedies, and strong impressions are trusted to, but in those in which, with mild medical treatment, are brought to bear the continual influences of a benign and paternal authority, a profound knowledge of the human heart, and a philanthropy which finds its greatest happiness in alleviating human suffering. From these remarks, it will be seen, how much of remedial power and influence may be wielded by those having the daily and hourly charge of the insane. The task of administering to disorders which distract the reason, and pervert the affections, and afflict the fancy with false or fearful

images, is of a highly delicate character—too delicate to be intrusted to others, than to those whose thoughts and mental habits have subjected them to a long preparation for it. In the Sisters of Charity are associated a combination of qualities, peculiarly and fully adapting them for these important duties. The high per-centage of recoveries in this institution is no doubt mainly attributable to their untiring assiduity and devotion, to their perfect self-abandonment, and self-sacrificing zeal in the discharge of the duties committed to them. Deeply imbued, as their hearts are, with those principles and feelings, which are the direct emanations and blessed fruits of that enlightened and universal *charity*, which has its imperishable root in the Christian religion, they also bring to bear those influences, which female ingenuity, and womanly tenderness can alone devise and apply. Man's less delicate sensibility can scarcely comprehend, much less employ the ready resources she ever has at hand to encourage and soothe the patient. She best knows how to reanimate the feminine heart by such confidential employments, and how to influence it by such arguments and suggestions as man's more difficult nature can never become master of.

But it is at the *period of convalescence* especially, that the zeal and uncalculating philanthropy of the Sisters prove in a high degree auxiliary to the efforts of the physician. As the atmosphere of the mind begins to clear, the recovery of the patient is greatly promoted, by having the assistance of those possessing sufficient intelligence and tact, to steady the faltering reason, and to aid in dispelling the dark clouds which, still to an extent, overshadow the mental faculties. Brought, as the Sister is, into constant and familiar contact with the patient, she is the first to discover the early dawns of returning reason, and much now depends upon the manner in which the mental powers are assisted in emancipating themselves from the morbid bondage. If any lingering delusion is, at this critical moment, harshly opposed, or any painful recollections suddenly revived, much injury may be done to the patient, and his convalescence be greatly retarded. If, on the other hand, his feelings are sought to be calmed by suggestions advanced with kindness and sincerity, and in the soothing language of friendship—if the early glimmerings of reason are elicited by gentleness and kindness, and strengthened by the voice of comfort and encouragement, the healthy balance of the mind will speedily be restored, and reason again resume its throne. This happy faculty, of managing aright the important period of convalescence, is the reward alone of prolonged intercourse with the insane and devoted attention to them; and therein consists the distinguishing and crowning advantage of this institution."

Dr. S. enforces the importance of an early removal of patients to an asylum in the following:—

"Thus of the aggregate number of one hundred and thirty four recent cases discharged in five years, one hundred were restored, thirty-two prematurely recovered, and two died. This result will be conceded by every one, not only to reflect credit upon the institution, but to demonstrate, incontestably, the ready curability of almost all cases subjected to early treatment. As high a percentage of cures can hardly be predicted of any other malady to which the human system is liable. With these facts before us, we unhesitatingly avow it as our firm conviction, that if patients

were placed under favorable circumstances for recovery, whilst the disease is in its acute stage, it would soon become a rare spectacle to witness a case of hopeless, incurable lunacy, within the walls of our asylums. Stronger evidence in corroboration of this fact could not be furnished than the following—*but three of all the cases admitted as recent during a period of more than five years have terminated in dementia, and remain inmates of the house in a chronic, incurable state of mental disease.* Many of the recent cases admitted during these five years were, unfortunately, prematurely removed by friends, and on their own responsibility. How the malady issued in those cases we are unable to say. But all the acute cases, that were fully and unconditionally consigned to our care, with the determination to abide the issue, have been restored to mental health, and to the enjoyment of their mental faculties, *with the exception of five.* Of this number two died, and *three* remain with us laboring under chronic insanity, with little or no prospect of a restoration. Hence we say, *that would an immediate resort be had in all cases, to active measures of relief, whilst the disease is still recent, cases of hopeless, remediless lunacy would henceforth be rarely witnessed within the walls of our asylum.*

"Report of the Chicago Retreat for the Insane. By EDWARD MEAD, M. D., Superintendent."—The legislature of Illinois at its last session, enacted a bill for the establishment of a State Lunatic Asylum. Two years, however, will be required for the erection of a suitable edifice. In the mean time, Dr. Mead, who has bestowed much attention to the subject of insanity, and who has been for several years past zealously occupied in bringing the importance of state provisions before the people, and the legislature, has opened a Retreat at Chicago as a private enterprize. This report is the first he has issued. It is dated February, 1848, and the institution had been in operation since August, 1847. Fifteen patients had been admitted, five of whom were restored, one had died of disease of heart and lungs, and nine were remaining at the Retreat. Dr. Mead's accommodations are at present limited. The Retreat, however, is intended to be permanent, and an edifice is now under construction, situated two miles from Chicago, near the lake shore, which will accommodate, when completed, 150 patients. We hope that the result of the Dr's undertaking will prove profitable, both to himself, and those who may avail themselves of the benefits of his institution.

This completes the list of reports with which we have been favored. We are fully aware that we have done them but feeble justice in the meagre notices which we have given, but the facts which they contain cannot well be presented more concisely than they are in the reports, and to do them full justice, it would be necessary to transfer them entire to our pages. The profession generally cannot but take a deep interest in the subject of insanity, and it is a source of satisfaction, and pride, that this province of

medical knowledge, and humanity, is being cultivated in this country with a degree of zeal and success, which, in the end, cannot fail of effecting all that science, and the most enlightened philanthropy can reasonably expect to accomplish.

Physicians and the Clergy.—At the annual convention of the Connecticut Medical Society, May, 1848, the following preamble and resolution were submitted by one of the members, and laid upon the table for consideration at the next convention:—

"Whereas, it is believed to be the custom of the regular physicians of the State, at the present time, to render *medical services* to clergymen and their families gratuitously;

"And whereas it is believed that as a class of citizens, (their education, intelligence, and moral standing considered,) they do more than any other class in the community to embarrass the legitimate influence of the medical profession; Therefore,

"*Resolved*—That as a rule we adopt the practice of charging clergymen the same fees as other citizens, except in cases of misfortune or inability, which would render it burdensome to make a just compensation for services rendered."

The subjects involved in the foregoing preamble and resolution have, of late, occasioned considerable discussion in medical journals. We have made the citation as a text for a few remarks.

We cannot accord in the propriety of the resolution as a consequence of the facts stated in the second paragraph of the preamble. Admitting that, as a class of citizens, clergymen have done much to impair public confidence in the medical profession, it does not strike us that, *on that account*, we should adopt a new line of conduct toward them, as respects charging fees, or other measures. This would be acting with a spirit of retaliation, and would compromise the self-respect of the profession. Besides, the offence charged upon the clergy is not justly attributable to them as a body, but applies only to a certain portion, for whose actions it would be as unjust to hold the whole class responsible, as it is for the public to hold our profession responsible for the ignorance and misconduct of individual practitioners of medicine. If there be any good reasons why the clergy should not be charged for medical services, it should by no means be insisted that they are thereby placed under such obligations to the profession, that they are bound, for this reason, to say or do nothing to prejudice its character and interests. It would be indelicate, on our part, to urge any such claim, and involves a concession of weakness which, for one, we are unwilling to acknowledge. We should be slow to concede that the medical profession

is in danger of suffering serious injury, or inconvenience, from the efforts of those clergymen who throw the weight of their influence in the scale of empiricism. The public have more reason to find fault on this score than the profession. We would not, in short, circumscribe, in the least, the freedom of the clergy as respects our profession. It is their prerogative, as it is the prerogative of every one, to think and speak of us they please; they have an indisputable right to indulge in medical delusions, and to recommend quack nostrums. These are among the inalienable privileges of freemen—privileges for the exercise of which, certainly, the clerical profession involves no disqualification!

The question, then, turns, not on what is due from the clergy to us by way of recompense for services professedly gratuitous, but solely on its abstract merits. Let us consider, briefly, the reasons *pro.* and *con.* which bear upon it. We will say here, that our opinion is averse to the exemption of the clergy from medical fees, as a general rule. We are in favor of adopting the custom of making charges against them, as against others. This course, in the first place, is but fair toward them. It places them in an independent position with respect to us. They ought not, as we have just remarked, feel trammelled by obligation to our profession, which shall either compromise their opinions respecting us, or their perfect freedom of speech and actions in regard to us. Such obligations, it should be considered, may not only prove a restraint upon their sayings and doing against us, but tend to impair the force of their efforts in our behalf. The countenance of the clergy would be less open to suspicion of being unbiassed, if they stood in an independent relation to us, and would, therefore, be more valuable in the estimation of the captious.

In the second place, as our friend Prof. Coventry has remarked in a communication on the subject of medical reform, published some years since in the *New-York Journal of Medicine*, the Clergy would place a higher value upon medical services if, like others, they were accustomed to regard them by the light of a respectable pecuniary equivalent. We are inclined, with Prof. C., to think that the want of confidence in legitimate medicine which prevails among the clergy, is, in no small degree, attributable to the fact, that they are accustomed to receive medical services gratuitously. Cash valuation is the general standard by which most benefits are appreciated, and, it is highly probable, this consideration has its effect with clergymen, as with others.

A third reason, and one which appears to us all-sufficient of itself, is, that, as a general rule, clergymen are better able to pay for medical

services, than physicians to bestow them gratuitously. The salary of a clergyman, it is true, seldom, if ever, enables him to accumulate wealth, and wealth is occasionally acquired by the practice of medicine; but, if we do not err, the average pecuniary compensation of the clergy is above the average compensation of physicians. The former, too, have this advantage:—they generally enjoy a respectable income directly upon entering their profession, while the physician, for several years, is generally compelled to struggle with pecuniary embarrassments. It not infrequently happens that the physician gives his services to clergymen in easy circumstances, while he is himself harassed with the anxieties of providing for his family. Appreciating the injustice of this, clergymen often insist upon returning a pecuniary equivalent. Such instances have fallen under our own knowledge and experience. Looking at the abstract merits of the matter, it certainly seems to be a fair conclusion, that if clergymen are better able to pay for medical services, than physicians are to forego compensation, it is due to the latter, and but justice to both parties, that such services should not be gratuitously rendered.

Let us look, now, at some of the reasons which may be adduced to sustain an opposite opinion. It may be said that the clergy have usually moderate incomes. We have just disposed of that objection. The medical profession, generally, are as poorly paid as the clerical. It may be added, that it is not the fault of physicians that the clergy are not better paid than they are. In determining the salary of a clergyman as adequate to his wants, all his expenses should be considered, and his parishoners should include, and make proper allowance for medical, as well as other bills. No other class of the community than the medical, act upon the principle that the clergy are not to be charged. The grocer, butcher, tailor, dry-goods seller, etc., do not expect to abate in the price of their commodities in consequence of the clerical profession of the purchaser; why should this be required of the physician? There are, of course instances in which it is not less a duty, than a privilege, to render services to clergymen, as to others, without charge. Their circumstances may call for this exemption, or it may be done as a tribute of personal consideration or friendship. We are not contending that in their professional relations to individual members of the clerical calling, physicians may not be as liberal and friendly as they please, but we are considering the propriety of a principle, or general rule.

Another reason which may be assigned is, that proper respect for the clergy demands that medical services should be gratuitously bestowed.

But we may ask, why is this particular method of testifying respect applicable solely to medical men? It is not considered disrespectful for every other class not to vary in their dealings with clergymen from their general principles of doing business, why should a similar course be disrespectful in a physician? If one will reflect a moment upon these inquiries, the force of this reason will, as we think, be found to consist wholly in its speciousness.

No other reason occurs to us, except that it may be considered good policy to conciliate, in this way, the good opinion of the clergy, in order to secure their influence. As applicable to the profession at large, this reason has not even the merit of speciousness. If medicine, and the medical profession, cannot be sustained without dependence on extrinsic support, let them go. We ask nothing beyond a fair appreciation of their intrinsic qualities. As applicable to individuals, the reason is even more objectionable. A course which institutes claims for professional patronage, other than those springing from professional and moral worth, is surely to be scouted by every true lover of his profession, and nothing can be more contemptible than an attempt to secure the favor of a religious congregation by clinging to the skirts of its pastor. We should feel that we were insulting our readers were we to dwell longer upon this topic.

We have been led to indulge in this brief discussion, by having noticed several articles in our exchanges, which have suggested reflections upon the subject. The truth is, the medical profession sustains a disproportionate share of public labor, for which no compensation is received, and but little credit. We are expected to be ever prompt and ready to devote our services to the poor, and public sentiment is shocked at any want of alacrity, or at any intimation that the *onus* should be more equally distributed. Gratuitous services to the clergy are virtually rendered to the public, inasmuch as the public are bound to afford an adequate, independent support to those who minister in holy things. Medical men, as a class, probably contribute their full quota for the support of the ministry, and other public objects, exclusive of services of a professional character. Our profession, as all must admit, is one of constant labor and anxiety. We do not, like the clergy, have frequent opportunities for relaxation. The pastor may annually leave his duties for a season, for health and enjoyment. It is seldom that the medical practitioner can in this way recruit his strength and energies. His vocation requires him to be ever at his post, or, if he takes a brief period of relaxation, it requires a sacrifice he can often ill afford to make. It is one of the highest recommendations of our calling, that it

affords so many opportunities for charitable actions. We would not relinquish an iota of its character as a humane profession. But we think the public has yet much to learn respecting the reciprocal duties which exist between it and the profession. Were these duties better understood, the public would be, if not more considerate, at least more gracious in some of its requisitions.

Annual Announcement of the Medical Department of Pennsylvania College, Session of 1848-9.

We are led to notice circulars from Medical Schools more fully at this time than usual, in as much as, it is to be presumed, the Medical Public are interested in knowing the position which they severally take, with respect to the measures of improvement recommended by the Medical Public through their Representatives in the National Association. In the Annual Announcement of the Medical Department of Pennsylvania College (the third Medical Institution of Philadelphia, enumerating in the order of time,) we find the following remarks on the subject of increasing the number of Professors:

"The Faculty comprises six chairs, constituting the original platform of the American schools. It is believed that among these six, all the various branches of medical science may be so distributed as to give each its due prominence, and allow the neglect of none. The natural subdivision of medical study is into six branches, three preparatory and three practical. A seventh is not an essential constituent, as is sufficiently proven by its indefinite character in many instances, the fragmentary and incoherent matters referred to it in others, and the generally prevalent confusion concerning its objects and limits. It appears to be regarded as a means of filling all and any *lacunæ* whatever in the other chairs. Such a supplementary irregularity this Faculty has not seen fit to establish. They do not, however, assert that no profitable change in the arrangement of the branches is possible. That physiology is now assuming a degree of extent and importance which renders it difficult to teach it adequately in the same course with anatomy is apparent. It will therefore require eventually, if it does not at present, a chair to itself. This addition the Faculty has had in contemplation for some time, and will perfect it so soon as they conclude that they can do so in a manner conducive to the best interests of the pupils, and without invading the essential limits and rights of the original chairs."

We submit, in the first place, that the tone of the foregoing paragraph is discourteous toward other Institutions that have adopted the recommendation to increase the number of chairs to seven. It is a fling at the latter, which might be expected in a pamphlet advocating the superlative claims of a patent nostrum, but, in our humble opinion, ill becoming a document coming from the Faculty of a Medical College. We do not hesi-

tate thus to express freely our opinion, because, as we quote the paragraph to which we refer in full, the reader is enabled to form his own opinion, irrespective of any criticism of ours. In the second place, the statements so dogmatically asserted are absurdly incorrect. We would ask the Faculty of the Medical Department of Pennsylvania College to name the Institutions where the seventh chair has an "indefinite character," branches being allotted to it which are "fragmentary and incoherent," and where it is to be characterized by a "generally prevalent confusion concerning its objects and limits." Generally, we believe, in Institutions in which a seventh chair has been created, the province of instruction allotted to it is Physiology; other branches, separately or associated with Physiology, which have been selected for distinct courses are Clinical Medicine and general Pathology. Will it be contended by any Faculty that the latter subjects do not afford sufficient scope for instruction, separately from the Principles and Practice of Medicine? Is a Professor of these branches merely occupied in filling *lacunæ* in the other chairs, to quote the contemptuous figure of the circular? We trust for the credit of the Medical Department of Pennsylvania College, that they who have in charge instruction in these branches, in that Institution, as collateral to other branches, do not practically treat of them as so very insignificant as the quotation implies. But in the last part of the paragraph the Faculty say, "that Physiology is now assuming a degree of extent and importance which renders it difficult to teach it adequately in the same course with Anatomy, is apparent. It will therefore require eventually, if it does not at present, a chair to itself." What is this but a full admission that they ought, in justice to their pupils, to institute a seventh chair at once, notwithstanding the *tirade* to the contrary which immediately precedes the sentence just quoted? Would it not have been in better taste, and in a better spirit, if the Faculty had said in so many words. "It does not suit our present convenience or interests to increase the number of our corps, but we may do so hereafter."

With reference to dissections, the Faculty now make them essential for graduation. They say:—

"In common with most of the Schools, this Institution has not hitherto made dissection an essential pre-requisite to graduation. The Faculty has resolved, however, that hereafter no candidate shall be admitted to examination who has not attended one course of Practical Anatomy. The value, and even necessity of this regulation will be apparent at once to every physician."

The Faculty express a conviction adverse to the propriety of extending the lecture session. We quote their remarks on this subject in full, and without comment:—

"It will be perceived that, while the time for commencing the course has been fixed so as to correspond with that of the other schools of the city; there has been no further increase in the length of the course. The Faculty still feel, as they always have done, convinced that the established course is long enough. All experience has proved that the pupils become wearied and exhausted by the end of that time, and that the classes grow thin before its termination. The quantity of matter presented, and the amount of attention and study required, exact from the youthful student a labor too great to be comfortably borne for a longer period. To spread the same amount of instruction over five or six months involves a long and fatal separation of the student from his private preceptor. If carried out, it will eventually destroy office tuition, or oblige the student to resort for it to the cities where the schools are located. Hitherto it has been presumed that instruction in the rudiments of the science, together with practical information, was to be expected from the private preceptor, and the fee has been proportionate. The primary relation of the pupil is to the practitioner in whose office he studies. The school is intended to supply that which the private instructor cannot give. It is not, of itself competent to give the entire amount of tuition. If the student is required to spend half the year at the school, and we then deduct the time necessary for preparation, traveling, visiting friends, &c., it is evident that the office is rendered of no account, and the name of a private preceptor can be required only *pro forma*. The true plan would be to have each student study three years with a respectable practitioner, and attend three courses of lectures, and thus the Faculty of Pennsylvania Medical College urge upon their pupils. They do not and cannot require it, but they earnestly recommend it. The fees are, of course, demanded only for two sessions. Three courses of four months each, would give the student a complete year of college instruction with two of office tuition, and it is believed that this will eventually be adopted as the true plan. The Faculty dissent reluctantly from any thing that has been proposed and industriously urged before the profession as a reformatory movement, but they are convinced that all change is not necessarily reform."

Report on the Medical Department of the University of Pennsylvania, for the year 1848: to the Alumni of the School. By the Medical Faculty.

This report is, in other words, an annual *announcement*, or *circular*, and *catalogue*, of the Medical Department of the University of Pennsylvania for the year 1848. This venerable institution, it will not be forgotten, led the way in extending the term of instruction from four to five months, in partial conformity with the recommendation of the American Medical Association. Of the result of the experiment the report speaks as follows:

"The Faculty have unalloyed satisfaction in stating to the friends of the

school, that their expectations in relation to the numbers and character of the class have been greatly exceeded; and they consider the fact to have been established by the experience of the past year, that the improvement in regard to the extension of the courses of instruction in the schools, proposed by the Convention is quite feasible. So far from the apprehended diminution having taken place, the number of students in attendance upon the lectures, as shown by the accompanying catalogue, exceeded that of any former year; and the class of the University for the late session is believed to have been the largest ever assembled upon this continent. The young men came actuated by the spirit of their preceptors, and generally eager for the proposed extension of their study; and most of them remained with an unflagging attention until near the close of the session. It is true that many of those attending upon their first course, left us before the period had expired; but this has always been the case, to a certain extent, even when the length of the session did not exceed four months; and it will be impossible to obviate such a result, until other schools in our neighborhood, as we sincerely hope will ultimately be the case, shall come into the same measure recommended by the Convention."

Some changes have taken place in the Faculty during the last year. Prof. Hare, so long the incumbent of the chair of Chemistry, has resigned, and Prof. James B. Rogers appointed his successor. The chair of Clinical Surgery has been vacated by the disease of Prof. Jacob Randolph, and is now filled by the appointment of Dr. Geo. W. Norris.

The Faculty propose, if the extension of the lecture term to five months be generally adopted by other schools, to extend to six months, so as fully to meet the views of the Association. They add as follows:—

"They wish it to be understood, that they sympathize heartily in the general sentiments of the medical public in relation to the elevation of the profession in character and usefulness; and are prepared to co-operate, so far as the instrumentality of the schools may be required, in all feasible measures for the promotion of that object. The possession of a due amount of primary knowledge by the student is at present, perhaps the point of greatest importance. The Faculty have reason to believe that the classes are yearly improving in this respect; and it is their wish that a gradual advance may take place, until the honors of the Institution shall be considered an evidence as well of general as of professional accomplishment. But the co-operation of the private medical teachers throughout the country is essential; and the Faculty sincerely hope, that increased attention to the very important point of preliminary education, may be among the happy results of the great movement in which the profession is now engaged."

Notices of new publications, and other editorial articles are crowded out of this number. A Review by Prof. Lee, received too late for this number, will appear in our next. The reader is requested to make the following corrections in the article by Dr. C. Green in our last number, on the preparation of chloroform,—in the last paragraph, for 3v read 3v. In the last paragraph but one, second line, for *backwards*, read *forwards*.

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ORIGINAL COMMUNICATIONS.

ART. I.—*On the Medical Treatment of Cataract.*—By WM. G. SMITH, M. D. Communicated by letter to DR. JAMES BRYAN, M. D., to the College of Physicians and Surgeons of Philadelphia, Pa.

[We invite the attention of our readers to the following letter of Dr. Smith, communicated by James Bryan, M. D., President of the College of Physicians and Surgeons, and Chairman of Committee on Surgery. Dr. Bryan has published several cases of Cataract successfully treated upon the plan laid down in the following communication, and we understand that he has several now under treatment, which promise the same success as have attended his published cases.—ED. BUF. MED. JOUR.]

To the President, Officers and Members of the College of Physicians and Surgeons of Philadelphia:—

In the month of April, 1848, I sent a letter to Dr. James Bryan, your President, in which I gave an account of the medical treatment which I adopted in a case of cataract, which, together with several other cases of cataract cured by Dr. Bryan, and remarks on the same by him, have been published in Dr. Houston's valuable Medical Journal (July number, 1848). Having since had two other cases of cataract, which I have cured by medical means, I think it my duty to report them, to be read at one of your meetings.

When I say that I have cured two cases of cataract, I do not wish it to be understood that the patients had entirely lost their sight. You will
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perceive by reading the cases, that they could see a little when placed under my care.

I am aware that the editor of a medical Journal in your city has said, that my curing a case of cataract was "all humbug." I hope it has not come to this, that a man must be put down because he has done what some other men supposed impracticable; if it be so, slow will be the advancement of medical science. This is a time of free thought, and it is the duty of every medical man to think and act for himself, and not be trammelled by any man, or body of men. But I have said enough on this point.

Case 1st.—May 4th, '48.—Mrs. D., aged 23, of delicate appearance, called on me to inquire if I could do any thing to help her sight. She said she had been a hard working woman, had taken care of a large number of boarders, for a long time, doing the washing, ironing and cooking for the whole of them, in consequence of which her eyes had been much exposed to the blaze and heat of a large fire. She could not distinguish her own children from others, even when in the same room, unless they were close at hand; she could see best in cloudy days, at the close of day, and in the morning when she first waked up; every thing she saw appeared to be in a cloud. She complained of pain in the head and eyes. Tongue was coated, bowels costive, no desire for food of any kind. By looking into the eyes I saw (instead of that black appearance which we see in the pupil of a healthy eye,) a dirty appearance, being more observable in the centre of the pupil than at the circumference; the lens of the left eye being more opaque than that of the right.

I then told the woman and her husband who was present, that the disease was cataract, and that there might be a chance for improved vision. They then told me that they had called on a physician of this place, who, after examining her eyes, said that the disease was cataract. I then directed her to wear a pair of gray glasses during the day, and remain quiet in a room moderately dark; to live on a farinaceous diet, with half a pint of milk daily.

May 5th.—Applied four large foreign leeches to the external angle of the left eye, and three to the external angle of the right, applied a blister behind each ear, and at night gave her six grains of blue mass, followed, the next morning, with two compound cathartic pills, which operated well.

May 6th.—The pain in the head and eyes is diminished, blisters have drawn well. Still she has no appetite. Gave her the following powder

three times a day until the 17th instant, when the mouth became sore:—hydrarg. cum cret. gr. ii, sup. carb. soda iv grains, and sulp. quinine gr. ss.

May 7th.—Feels some better. Applied five leeches to external angle of right eye, and three to external angle of left eye, which bled freely.

May 8th.—Eyes and head feel much better, and can see better, bowels regular, tongue clean, and appetite improving; blisters behind the ears have healed; I now put one on the back of the neck, which drew well.

May 9th.—Patient is comfortable. Can now distinguish her children from others in any part of a light room. She continued her medicine, kept the blister discharging until the 17th, when I suspended the mercury and continued soda and quinine, and, in addition, gave two grains iodide of Potassium three times a day. I this day, May 17th, applied three leeches to the external angle of each eye, and placed a blister behind each ear. I continued her present medicine until the 29th May, occasionally moving the bowels by sulp. magnesia and senna, and keeping a free discharge from the blisters which I applied, alternately, behind the ears, and to the back of the neck.

May 30th.—I called on her; said she could see well, and also felt well. I then discontinued all treatment. Before I left the house I saw her pick up a small cambric needle from the floor without the aid of glasses. This day she had read a letter and wrote an answer to the same. She now, July 28th, does the work for her family, consisting of ten persons.

Case 2d.—May 9th.—Mrs. H., aged 50, called on me, complaining of pain in her head and eyes; said she could see but very little, and remarked that objects appeared to be in a mist. She has been subject to rheumatic pains in her limbs and head, with severe pain at the same time in her eyes. Her uncle has been blind, with cataract in both eyes, for the last fifteen years. She says she is afraid she shall be blind from the same disease, because, for several years past, she has suffered with the same symptoms as did her uncle for several years previous to his loss of sight.

Present state:—pulse strong and full; plethoric state of the system; bowels costive, tongue little coated, moderate appetite; pain in the limbs, joints, head, and eyes; cannot see any better than Mrs. D. The eyes presented the same change as those of Mrs. D., and the lens of each eye as much altered in color, the left one being the worst. As she could not remain in the place, but must return home, I advised her to send for her physician as soon as convenient, and request him to bleed her thirty ounces from her arm, which she did, and also to apply 12 American, or 6 foreign

leeches in the immediate vicinity of each eye, and a blister behind each ear, directed her to take an infusion of salts and senna, with ten drops of the wine of colchicum seeds, every other morning, so as to procure three evacuations during the day, and to take 6 gra. of blue mass every night; to live on bread and water, keep in a moderately dark room during the day, and wear gray glasses. She came again to see me on the 19th of May, and reported herself much better, had not applied the leeches, being unable to procure any in her town, but sight was improved a little. I immediately applied 4 large Spanish leeches to the external angle of each eye, the bites of which bled freely for 8 hours. She then becoming faint, I was obliged to arrest the bleeding. The next morning she left for home, with instructions to take the medicine as before, the mercury to be suspended when the mouth became sore, and to live on bread and water. *May 28*—sent me word that the mouth was a little sore, had discontinued the mercury; and that all of her bad feelings and pains had left her, and her sight was rapidly improving—sent her word to take only the salts and senna every third morning, keep blisters discharging, and to live on a more nourishing diet. *June 12*—this woman called on me, and reported herself well. I then examined her eyes, and found that the opacity was entirely removed. Last week I saw this woman's relations, who informed me, that she could see as well as when I last saw her.

I believe any medical man, after reading the above cases, and those published by Dr. Bryan, will come to the conclusion, that there are some forms of cataract which may be cured in their early stages, at least, without an operation. This being the fact, I think it is the duty of every medical man, when a case of cataract is brought to him, to do all that he can to arrest, or remove it by constitutional and local means, and not say 'I can do nothing, you must wait till the cataract is matured, and, then run the risk of an operation.'

All writers on diseases of the eye, concur in the opinion that cataracts may be produced by congestion, common, or rheumatic inflammation of the different coats, or internal structure of the eye, their formation being attended in those cases with all the symptoms indicating an unusual determination of blood to the head, and frequently a general fulness of the system. This being the fact, why cannot those cases of cataract be removed in their early, or immature state, by alteratives, counter irritation, and antiphlogistics?

Again, the eye contains specimens of all the animal tissues, and, of course, the same morbid changes take place in it, in consequence of inflammation, as in other parts of the body, and are as frequently removed by the same remedies. When we have inflammation of the pleura, we have the secretion lessened, but, most frequently there is an effusion of serum, and, sometimes, an excess of the nutritive secretion appears on the exterior of the membrane in various forms, and the lung may become secondarily affected. Now inflammation produces the same morbid changes in the crystalline capsule, (which is a "sero-vascular membrane," and which "contains lymphatics on its inner or serous portion") in consequence of which we may have capsular cataracts, and if the lens becomes secondarily diseased, we may have capsulo-lenticular cataract. All physicians know that bleeding, purgatives, calomel, &c., will cure disease of the pleura, and regulate its secretions; and why will not the same remedies remove the same morbid changes in the crystalline capsule and lens, if resorted to before the absorbing properties of the capsule are much altered by disease? Sir David Brewster regards cataract, "as a disease which arises from the unhealthy secretion of the aqueous humor," and thinks that cataract may be cured in its early stages, and in proof of this, he adduces the case of his own eye, in which the disease had made considerable progress, and was cured by paying the greatest attention to diet and regimen, and abstaining from reading at night, and all exposure of the eyes to fatigue or strong lights. (You will see his views on this subject fully explained on the 626 & 7th pages of Lawrence on the eye, by Hays, published 1847.)

Allow me to say, in conclusion, that the treatment of cataract by medical means, I learned from Dr. James Bryan, whilst attending his valuable lectures on surgery, during the last winter.

Very respectfully yours,

WILLIAM G. SMITH.

GREAT FALLS, N. H., July 31st, 1848.

ART. II.—*Case of Hematuria—Death—Carcinoma of Bladder.* By the
EDITOR.

The following case, which came under observation a few weeks since, is reported from brief notes made at the time of its occurrence:—G. J. P., aged about 60; had generally enjoyed good health, but of late had presented a pallid aspect, *and had complained frequently; more especially at night, of sharp cutting pains in the lower part of the abdomen;* applied on the 4th ult. for advice, stating that for two or three days his urine had been bloody, and that he was then troubled with some dysury. On examination of the urine, made shortly afterward, it appeared to contain considerable blood. On the evening of the same day, being requested to visit him, I found him in great distress, and unable to void urine except in very small quantity. He succeeded, however, by his own efforts, in relieving the bladder shortly after I entered the room. An enema of starch and tinct. opii was directed, should the dysury return.

On the 5th found he had suffered much from strangury during the night. The anodyne enema had not been administered until morning. Was now sleeping, and the urine had escaped abundantly during his sleep. The bed appeared deluged with blood. He suffered much through the day from strangury, and the urine continued to be very bloody. Prescribed infus. uvae ursi, copaiva mixture, laudanum enemas frequently repeated, and hip baths. There was no pain, nor tenderness in loins, but sensitiveness to pressure over hypogastric region. Up to the 13th he continued to suffer greatly from difficult micturition, the bladder, however, relieving itself, for the most part, under the influence of anodyne enemas, which were repeated at short intervals, and of hip baths, or fomentations. The quantity of blood gradually diminished, and the urine assumed nearly its natural appearance. The copaiva mixture, after a couple of days, was omitted, and the tinct. mur. ferri freely given. The uva ursi and mucilages were continued. There was no febrile movement, and his muscular strength was not much impaired. On the 14th he passed a very distressed night, and the urine again became very bloody. Dr. A. S. Sprague saw the patient with me several times on this day. The pulse on this day became very feeble, so as scarcely to be felt, the skin was cold, and the muscular force much prostrated. On getting out of bed to make efforts to relieve the bladder, he fainted, and his family were obliged to call in assistance to remove him from the floor to the bed. On examination of the hypogastrium the distended bladder could be readily felt, and, from its want of resiliency, it seemed to be filled

with a solid mass. The suffering from dysuria was extreme. Dr. Sprague attempted to introduce a catheter, but on passing it a short distance, the instrument encountered an obstacle which could not be overcome, and the attempt occasioned excruciating pain. The treatment consisted in the free administration of opiates by the mouth, and per ano. He continued to experience great agony up to the time of his death, which occurred on the morning of the 15th.

On examination, after death, the bladder was found largely distended with coagula, and a fluid resembling bloody serum. The exact amount of contents in weight was not ascertained, but the coagula alone, as it was estimated, amounted to between two and three pounds. The amount of hæmorrhage, it would seem, was sufficient to have caused death. The contents of the bladder exhibited no evidences of decomposition, showing that the effusion was recent. It probably occurred on the 13th when bloody urine re-appeared, and the patient presented the alarming prostration mentioned in the history.

On removing the bladder, the lining membrane appeared thickened, but no traces of inflammation or vascular injection were apparent. At the inferior portion near the urethral orifice, was a circular patch nearly as large as a half dollar, of carcinomatous degeneration. It was somewhat elevated, perfectly white, and of a medullary consistence. No ecchymosis was apparent, nor could any orifice into a vessel be discovered, whence the blood might have escaped.

In the only case, in addition to the foregoing, of excessive hæmaturia which has fallen within the knowledge of the writer, there was found on examination after death, malignant disease of the mucus membrane of the bladder.

BUFFALO, September, 1848.

ART. III.—*Prosecution for alledged Mal-Practice.*—Reported by Dr. HAMILTON.

Supreme Court—John C. Basset vs. John B. Collins and Anthony Barney.

In the fall of 1848, John C. Basset, of Independence, Allegany Co., aged 48, then in good health but corpulent, was injured by the upsetting of his wagon and the falling of a box, as was believed, upon his thigh. He was carried into a public house in Woodhull and there attended by Drs. Reed and Carey. After a careful and complete examination by measuring &c., they concluded that Mr. Basset had only received a severe bruise. He remained two weeks under their care and was then taken home in a bed. Four weeks after the accident Drs. Collins and Barney were called in, as the left leg was now said to be shortened and turned out. These gentlemen made an examination and found the leg in the following condition: shortened an inch and a half, the toes turned out, and could not be turned in, the left heel corresponding to the hollow of the right foot, a bunch in the groin like the head of the femur. They decided that it was a dislocation of the head of the femur upon the pubis, and with pulleys properly adjusted and carefully operated upon, proceeded to attempt its reduction. After two or three minutes' extension and counter-extension, a sound was heard, and a sensation felt by nearly all who were assisting, which was by them described as the sound and sensation usually produced when a dislocation is reduced. The patient was now released from the pulleys, and made to get up. The limb was of its original length and in its natural position, and the tumor in the groin had disappeared. The patient was again laid upon the bed and dismissed as cured.

It however appeared in testimony that a few days after, it was again shortened and turned out, but it does not appear that these facts came to the knowledge of the defendants: it also appeared that the plaintiff did not get the use of his limb so as to be able to dispense with crutches or a cane, in one or two years.

The limb is now shortened an inch and a half, and moderately turned out, but the motions of the joint are free and the plaintiff walks with a very slight halt and without inconvenience.

Drs. Collins and Barney were prosecuted and the case was tried in January, 1848, before Judge Marvin, but the jury having disagreed, it was again tried before Judge Mullett, in the circuit of the supreme court, held in August, 1848, in the town of Angelica, Allegany Co., N. Y.

In the first trial the plaintiff charged that the limb was sound when the

defendants took hold of it with the pulleys, and that they then fractured it through the neck and without the capsule.

In the last trial this was not claimed, but it was alleged that the original accident was probably a fracture without the capsule and without displacement: that when examined by Drs. Collins and Barney a displacement had occurred and that the defendants were chargeable with criminal negligence or ignorance, in not discovering that it was a fracture; and consequently for subjecting the plaintiff to the useless pain of extension with the pulleys, and in not applying subsequently a retentive apparatus, since through this omission, the plaintiff has a shortened and crooked leg.

On the defence it was admitted that the original accident was a fracture without displacement, but that it was *within* the capsule and near the head of the bone; that its being within the capsule and near the head could alone satisfactorily account for the "bunch" in the groin, which disappeared with the reduction, and for the slowness of the subsequent restoration of the limb. It was claimed, also, that the signs described by the witnesses were the ordinary signs of a dislocation upon the pubis, and would be likely to deceive the most skillful surgeon; that several eminent surgeons had mistaken fractures of the thigh for dislocations; that the extension with the pulleys did him no permanent injury; that the subsequent treatment pursued by the patient in this case, viz: keeping his bed for a few days and then getting about on crutches, would have been the proper treatment had the exact nature of the accident been fully known, and finally, that the patient has as good a limb as can ordinarily be expected in this fracture under the most skillful management.

The examination of the numerous witnesses having closed, the jury were addressed by the distinguished gentlemen, Messrs. Doolittle and Skinner for the plaintiff, and Messrs. Grover and Peck for the defendant; and the Hon. Judge followed with a most pungent and impressive charge, in which the jury were instructed to disregard all mere appeals to their prejudices, and especially to reject that counsel which would advise them to look upon the medical profession as an *oppressive and aristocratic monopoly*, and to decide the case upon the facts as drawn from the witnesses upon the stand.

The jury retired and in a few minutes returned a verdict for the defendants.

The defendants in this case, were men who have long practised both medicine and surgery in the county of Allegany. Dr Barney at Independence, and Dr Collins at Alfred; and they both occupy a high position in the estimation of the public, as men of skill and worth. Dr. Collins was

for some years an active member of the state legislature; and it is gratifying to know that in the mind of the Hon. Judge, as well as of the very intelligent jury, they received a full and unqualified acquittal from the charge of any degree of negligence or unskilfulness.

The medical witnesses examined on the part of the plaintiff, were Drs. John Read, of Woodhull, John R. Hartshorn, of Alfred, John H. Thorp, of Independence, and Charles D. Robinson, of Almond, all of Allegany Co., and Dr. Abijah Case, of Howard, Steuben Co. On the part of the defence were Drs. Erastus Willard, of Friendship, Richard Charles, of Angelica, Randall Reed, of Amity, George B. Jones, of Scio, Lorenzo Dana, of Friendship, and Walter Wallace, of Angelica, all of Allegany Co., and Dr. Frank H. Hamilton, of Buffalo, Erie Co.

There are several instances on record, where distinguished surgeons have mistaken a fracture at the neck of the femur for dislocation, and we have no doubt there have occurred thousands of similar errors in diagnosis, which have not been recorded, and which need only the friendly advice of some humane doctor, whispered in the ear of the unfortunate victim of the mistake, to bring them to light.

Sabatier, a distinguished Parisian surgeon, confesses that he had a case of fracture of the neck of the femur, without displacement, but in which he declared there was neither fracture nor dislocation. Some days after, shortening occurred, and he discovered his mistake. Ambrose Pare, surgeon to Henry II of France, and to three succeeding French kings, the most distinguished surgeon of his age, says that he attended a lady whose thigh he thought was dislocated, and accordingly he attempted to reduce it, and actually believed he had done so. Two days after, the limb was again shortened and the foot turned in, as at first; he again attempted to reduce it, but having accidentally discovered crepitus, the error was apparent. John Petit, director of the Academy of Surgery in Paris, and a great surgeon in his day, says that he diagnosed a fracture of the neck of the femur as a dislocation upward and backward, but at length discovered his error. Mr. Stanley, of London, relates a case in which a lad of 18 years fell, and was supposed to have dislocated the head of the femur into the foramen ovale, for the thigh was bent at a right angle with the body, and could by no means be extended; abduction was difficult; the toes were everted; the limb appeared to be lengthened; there was no crepitus.—From all these circumstances, together with the age of the patient, it was naturally enough concluded that it was a dislocation. Accordingly, the pulleys were applied and extension made. Three months after he died of

small pox in St. Bartholomew's hospital, London, and the post-mortem revealed the following facts: "the capsule was entire, but a little thickened; the ligamentum teres was uninjured, (of course no dislocation had ever occurred,) a line of fracture extended obliquely through the neck of the femur, and entirely within the capsule; the neck was shortened, but the fractured surfaces were in the closest apposition, and united nearly in their whole extent by bone, with an irregular callous around the seat of the fracture."

BUFFALO, Sept. 1848.

ART. IV.—*Practical Observations on certain Diseases of the Chest, and on the Principles of Auscultation.* By PEYTON BLAKESTON, M. D., F. R. S., etc. Philadelphia. Lea & Blanchard. 8vo. pp. 385.

It is now generally conceded, that diseases of the chest can only be correctly determined and discriminated by those who are practically acquainted with the principles of auscultation. So important is this art now considered in this country, that there is not a single medical school to be found, it is believed, in which it is not taught; and a course of medical instruction, into which this did not largely enter, would be deemed very imperfect and unsatisfactory. That the art is perfect, no one believes; that the conclusions derived from it, are sometimes erroneous, we all acknowledge; but that they are, for the most part, founded on truth, and furnish important rules for diagnosis and treatment, is universally admitted. True, we have some forms of disease for the detection or treatment of which no rules have as yet been laid down; this only proves, that additional facts are required for the establishment of other general principles, which may serve to prove the truth or fallacy of those already proposed. Hence it becomes the duty of those, who are favorably situated, to record and publish their observations; and hence, also, the value of reporting accurately, individual cases of disease, with their physical signs at different stages; and when fatal, the autopsic appearances. It is this feature in the works of Andral, Louis, and Abercrombie, which give them so much value in the eyes of medical men; and it is this same feature which stamps the present work with equal value.

The first fifty pages are devoted to a consideration of the "*Properties of Sound*," in which the principles of auscultation are developed in a very elementary manner. To those whose preliminary education has been incomplete, and whose acquaintance with the laws of physical science is necessarily imperfect, this part of the work will prove extremely valuable; to others, it will not be necessary.

We pass over the chapters devoted to the auscultation of the *Sounds of Respiration*, of the *Voice* and the *Heart*; also, on the *Practice of Auscultation*, in which we discover nothing particularly new. The chapter upon the *Formation, Termination, and Causes of Thoracic Aneurism*, abounds with useful hints and valuable cases, which do not however admit of condensative or complete analysis. On this subject the work of Hope is far the most satisfactory, and far in advance of any thing yet presented to the practitioner. An analysis of the thirty-seven cases presented by Dr. Blakiston leads to the following results: .

1. No diagnostic sign was furnished by the character of the pulse, or by the presence of pulsations above or below the clavicles.
2. When a pulsation was seen and felt over a prominent point in the chest, it indicated the presence of a sacculated or mixed aneurism.
3. Purring thrill was only valuable as a sign of aneurism in conjunction with other signs.
4. A Systolic murmur, heard at a distance from the heart, even though it were not heard at the precordial region, only afforded evidence of the existence of aneurism when it was combined with other signs denoting the existence of a circumscribed tumor.
5. A double or diastolic murmur confined to one spot, at a distance from the precordial region, denoted the existence of a sacculated aneurism.
6. When a hollow murmur was heard, a dilated aneurism was present.
7. The intensity of aneurismal murmur was in a great measure proportioned to the force of the heart's action.
8. Aneurism of both kinds existed without the slightest trace of pulsation or murmur.
9. Aneurism arising within the sac of the pericardium were not indicated during lifetime by any characteristic signs.

In relation to the treatment of thoracic aneurism, we observe nothing but what may be found in all systematic treatises of this subject. The indications, of course, are, the prevention of the increase, or rupture of a dilated aneurism; and 2nd. the obliteration of a sacculated aneurism by the deposition of fibrinous clot within it. The first indication is to be met by strengthening the walls of the pouch, or by diminishing the force of the current of blood, or by both means. The walls of the pouch may be strengthened by inducing inflammatory action in them, whereby lymph may be poured out between the coats. This might possibly be accomplished by a highly stimulating diet, but the dangers attending such a plan, are too

great to be hazarded. An extremely poor diet is equally objectionable, as are also large and frequent bleedings, and the immoderate use of purgatives.

The author regards digitalis as a dangerous sedative agent in these cases, and prefers the poppy and hyoscyamus as equally efficacious, and far safer. The extract of belladonna, rubbed over the precordial region, is recommended for tranquilizing the actions of the heart, as superior to any other drug. Though mental and bodily repose are important, they are not to be carried to such extent as to derange the organs of digestion.

Where iron is indicated, the author recommends the *Tincture of the Sesquichloride*, with hyoscyamus. The treatment, in short, is to consist in the use of sedative and purgative drugs, a moderate amount of food of a nutritious, but not over stimulating quality, rest of mind and body, and the application of cold to the surface of the chest nearest the sac. The treatment, however, must be modified by the circumstances of the case, and according as the disease is of the dilated or sacculated variety.

There are 64 cases, fully detailed, illustrating the progress and terminations of chronic heart diseases; from which, the following flattering conclusions are drawn:—

1. A considerable amount of obstruction may exist at the aortic orifice of the heart, without seriously affecting the general health.

2. Mitral regurgitation is one of the most direct and frequent causes of pulmonary venous congestion.

3. Tricuspid regurgitation, is the most, direct, and almost constant cause of that engorgement of the vessels of the general circulation and its consequences, which originate with the heart.

4. Except in conjunction with regurgitation through the auriculo-ventricular orifice, hypertrophy of the ventricles in many cases rather assists the circulation, than promotes congestion.

With respect to the diagnosis of chronic heart diseases, we believe that cases often occur, in which it is next to impossible to determine the exact seat or amount of valvular derangement, notwithstanding all the aids furnished by modern research, and the refinements of some recent writers. Irregular action of the heart may arise from so many causes, that the practitioner is often baffled in arriving at a knowledge of the true one.—Thus, cardiac derangements may originate from dyspepsia, hysteria, and nervous irritability, hyperaemia, and anemia, without any organic change whatever. Organic causes, however, are always to be suspected and searched for, even when any of the above conditions exist. Dyspepsia, nervous irritability and hyperaemia are easily recognised. In anemia, a

murmur is sometimes heard of the same character as that which occurs in aortic obstruction. It is seldom, however, persistent during a state of perfect repose; as, during sleep, upon gentle pressure, also, a similar sound may be detected on the course of the arteries of the neck. Under these circumstances, where the aortic murmur does not exceed that of a soft bellows sound, we may conclude that the cause of derangement is inorganic. Sometimes when the debility and irritability are very great, the heart becomes dilated to such an extent as to lead to tricuspid and mitral regurgitation.

But supposing we have arrived at the conclusion that the disease is of an organic nature, the next point to ascertain is, whether the difficulty exists in the contractile power of the heart, or the valvular apparatus, or both. If there is an increase of contractile power, it must be referred to hypertrophy of the left ventricle, indicated by a strong heaving impulse communicated to the hand, when laid over the cardiac region; the extent of precordial dullness will also be increased, more particularly, if, at the same time, the ventricles are dilated. The systolic sound, too, will be more muffled, and heard at a greater distance than usual from the precordial region. If there be a disease of contractile power, it must arise from attenuation and softening, perhaps from adhesion of the pericardium to the heart. If there be simple attenuation from dilatation, the extent of dullness over the precordial region is increased, and the sounds of the heart, although feeble, are sharp and clear, and are heard at a much greater distance than usual. If the ventricles are softened, especially if they are at the same time hypertrophied, both sounds are extremely feeble, and very much muffled and confused. We doubt whether there is any sign by which adhesion of the pericardium to the heart can be recognised.

With respect to *derangement of the valvular apparatus of the heart*, we have to ascertain, if possible, its *seat* and *nature*. If there be neither urgent dyspnoea, nor any signs of obstructed general circulation, we suspect the aortic orifice; but if very urgent dyspnoea be present alone, then we look to the mitral orifice, in expectation of finding regurgitation through it. If there be signs of obstruction to the general circulation, we shall expect to find tricuspid regurgitation, with, or without disease on the left side of the heart, according as the signs of pulmonary obstruction are present or not.

Aortic Orifice.—It is asserted by some writers that the seat of valvular murmurs is clearly indicated by their being heard with the greatest intensity at the exact spot on the surface of the chest which lies immediately

over the orifices in which they are respectively produced. Thus disease of the aortic orifice would give rise to a murmur, the greatest intensity of which would be under the left edge of the sternum below the third rib. But very often we find the maximum of such sound considerably to the right of this point, especially if hypertrophy be present. It is far more important to notice the direction in which murmurs are propagated. Thus when the murmur is aortic, it can generally be clearly traced for a considerable distance up the course of the aorta, and in some cases, it is heard louder towards the arch of the vessel than over the seat of the aortic valves. When the disease is obstructive only, the murmur is systolic, and its strength and the quality of sound depend in a great measure on the contractile power of the left ventricle, and on the nature of the material with which the orifice of the vessel is obstructed. When aortic regurgitation takes place, the sound is either diastolic or double. The diastolic sound in such cases is often heard farther to the right side than the systolic sound.

Mitral Orifice.—The physical signs of mitral obstruction are not in general so well marked as those of aortic obstructions; in a great measure, because the size of the auriculo-ventricular orifice is so large, that a considerable amount of disease may exist without sufficiently narrowing it to give rise to sound. When a murmur is thus produced, it is of course diastolic; and as a general rule, it may be heard louder towards the apex of the heart than elsewhere, and also with great distinctness near the lower angle of the left scapula. It is often, however, extremely difficult by its seat alone to distinguish this murmur from that of aortic regurgitation; but as in the latter case, there would be visible arterial pulsations, and none in the former, the differential diagnosis is rendered tolerably sure. Some also insist on the difference in the pulse in these two cases; it being small, irregular and tremulous in mitral disease, and jerking and sharp in aortic regurgitation; our author, however, questions the value of this sign, and states that a great amount of obstruction may exist at the mitral valve in some rare cases, where, in consequence of the aperture being contracted to a very narrow slit, the stream passes noiselessly through it. It is not always possible, therefore, to detect mitral regurgitation by a murmur when it exists, and not unfrequently no murmur at all is engendered.

Tricuspid Orifice.—Obstruction very rarely occurs at this orifice. It is generally supposed that when regurgitation takes place in this situation a systolic murmur is produced; but that is by no means a certain sign. Very often we observe in such cases venous pulsations or undulations in the neck, more marked on the right than on the left side; Dr. Hope, however,

thinks that they often arise from hypertrophy alone. The absence of venous pulsation by no means proves the absence of regurgitation. Their strength is rather a measure of the contractile force of the heart. Thus, if both ventricles are hypertrophied, a strong venous current will be met by an equally strong regurgitating current, the shock will be great, and the pulsations up the veins of the neck will be strongly marked. If both ventricles are softened or attenuated, a feeble venous current will be met by an equally feeble regurgitating current, and the thrill and pulsation will be slight, whilst the flow of venous blood will be as much impeded in the one case as in the other.

To sum up, we have then the following signs of valvular derangements:

AORTIC ORIFICE—Obstruction.—Systolic murmur traced up the course of the aorta, sometimes very prolonged. *Regurgitation.*—Diastolic murmur running up the aorta, visible arterial pulsations.

MITRAL ORIFICE—Obstruction.—Sometimes diastolic murmur at the apex of the heart, and at the lower angle of the left scapula, not up the aorta—without visible arterial pulsations—Pulmonary obstructions.

Regurgitation.—Sometimes, but not often, systolic murmur, heard at the apex of the heart, and at the lower angle of the left scapula, occasionally undulations between the second and third left ribs. Pulmonary obstruction—

Tricuspid Orifice—Regurgitation.—Seldom any murmur—venous pulsations of the neck, obstruction of the general circulation. Dropsy—

It is to be remembered that correctness of diagnosis is only valuable as it lays a foundation for treatment. With this in view, the chief endeavor of the practical physician will be to determine if organic disease of the heart is present, whether its contractile power is increased or diminished, and whether either or both of the circulations which result from it are obstructed. This will be accomplished with ease in most cases, although it may not be always possible to predict the exact state of each of the different valves.

The *Treatment* of chronic heart disease is very unsatisfactory. If there be no obstruction of the circulation, but evidences of hypertrophy of the ventricles, Dr. B. recommends occasional small bleedings, and opium, hyocyanus and conium to quiet the action of the heart; and especially local frictions with the belladonna or opium ointment over the precordial region. It is useless to attempt diminishing the size of the heart, but patients treated on the above plan, often live many years in a state of comparative ease and comfort. Cold to the head habitually is found to prevent that

cerebral congestion, so often dependent on such a state of the heart. To prevent valvular disease the author recommends mild mercurial frictions also over the precordial region, with a diet moderately stimulating, but sufficiently nutritious to sustain the strength of the patient. If the action of the heart be enfeebled, a tonic and sedative treatment is clearly indicated; such as the sesquichloride of iron, "generous diet, combined with mental repose, and moderate bodily exercise.

If there exist both hypertrophy and disease of the valves, on the left side of the heart, it is important to ascertain, if possible, whether the structural changes of the valves, are of such a nature as to give rise to mitral regurgitation or not; for if such be not the case, then we must be very careful how we venture to control the action of the heart, because this increase of force has the effect of keeping up the circulation by counteracting the effects of mitral and aortic obstruction, and of aortic regurgitation. If, however, mitral regurgitation takes place, we must, if possible, diminish the energy of the heart's action, in the manner just pointed out; because dilatation of the right side is now more than ever to be dreaded, from the engorgement of the right ventricle produced by pulmonary congestion. When aortic regurgitation takes place, if the action of the heart be rendered slower by digitalis, the diastole is prolonged, and the effect of regurgitation is thereby increased. Nature often gives relief in these cases by promoting a copious secretion from the mucous membranes of the bronchial tubes. Hence benefit is derived from expectorant remedies, such as squills, with camphor, ether, &c. We should also aim to relieve pulmonary congestion by the occasional application of leeches or cups between the shoulders, and blisters to the chest. If, in addition to the signs of valvular disease, the action of the heart is feeble, of course the tonic treatment must be combined with the means above mentioned.

Cases in which there are symptoms of general obstruction, may exist either with, or without those of pulmonary obstruction; that is, without obstructions arising from an imperfect state of the valves on the left side of the heart. When both the pulmonary and general circulations are thus obstructed, the case is very formidable, and generally drawing to a close; yet when there are no signs of disease on the left side of the heart, although it may often be impossible to pronounce whether there is structural derangement of the tricuspid valves, or whether the orifice is simply dilated; yet we can discover important guides to treatment, according as chronic disease of the lungs is present, or as the force of the heart's action is increased or diminished.

The treatment is to be conducted according to the rules above laid down; but in addition, we have now to relieve, if possible, the engorgement of the capillaries, and remove the serum that has been poured out. This is to be done by increasing the secretions from the kidneys, bowels, or skin. The former plan is generally the most successful. In some cases, simple diuretics will succeed, such as squilla, with nitric ether, acetate, or nitrate of potash, spirits of juniper, &c., with drinks made of cream of tartar, &c. Sometimes digitalis will succeed, when these fail. But to prevent its depressing effect on the system, which, in most cases is injurious, it must be carefully guarded with ammonia, wine, &c., when it proves a very powerful and safe diuretic. A good formula in such cases, is the following—infusion of digitalis, $\text{oss—spta. nit. ether, } \mathfrak{Z}_{ss}$, tinct of squilla, $\mathfrak{Z}_{ii}$, comp. tinct. cardamom. $\mathfrak{Z}_{ss}$, acetate of potass, $\mathfrak{Z}_{iii}$, sesquicarb of ammonia, $\mathfrak{Z}_{ss}$ —of this an ounce should be taken two or three times a day.

The chapters devoted to circumscribed and chronic *pleurisy*, embrace many interesting cases, which do not admit of analysis; they may be consulted by the practitioner with great advantage. In the treatment of acute pleurisy, the author proscribes general bleeding, and relies chiefly in leeches, and frictions of the affected side with mercurial and opium ointment, after the following formula.— $\mathfrak{R}$ ung. hydrarg, fort. $\mathfrak{Z}_{i}$ —camphoræ, $\mathfrak{Z}_{ss}$, pulv. opii. $\mathfrak{Z}_{i}$, misce. Between each friction, the chest is to be covered with large linseed-meal poultices, diluent drinks given, and aperient or diuretic medicines, singly, or in combination, according to circumstances. On the subsidence of the acute symptoms, the friction is to be discontinued, and the removal of the effused fluid promoted, if necessary, by blisters and diuretics. Under this treatment, D. B. states that no case of primary, uncomplicated pleurisy, terminated fatally, however acute the attack: but when other organs were affected, or when the pleurisy appeared in the course of some chronic disease, several cases terminated in death.

In the treatment of chronic pleurisy, Dr. B. relies chiefly on mild iodine, and mercurial frictions, with opium, if pain is present, and cream of tartar as a drink. If these means fail, blisters are applied, and the surface dressed with mild mercurial ointment, and stronger diuretic medicines given, light nutritious food, and mercurial tonics are also enjoined, the latter at a later period of the disease. In the more advanced cases, large blisters are early applied, followed by mercurial frictions, supporting the strength of the patient at the same time, by wine, quinine, ammonia, and beef tea. These means were found to diminish, rather than increase the

fever. In one case only out of 90, was paracentesis resorted to. Louis states that he has never seen a case of pleurisy, in which paracentesis was indicated.

Plastic Pneumonia.—Under this name, Dr. B. treats of ordinary pneumonia, or inflammation of the parenchyma of the lungs, the results of which are known under the names of *red and gray softening or hepatization and induration*.

There are two forms in ordinary acute pneumonia, one produced by congestion and inflammatory swelling of the vessels, and the other by the deposition of lymph. Dr. B. supposes that there is a form of pneumonia, which he calls *plastic*, in which lymph is deposited, with little or no fluid, and this may occur either in an aggregated or disseminated form, and the result chiefly of low, chronic inflammation. Cases are given in illustration, to which we can only refer.

Treatment of Pneumonia.—In this country, there is but little difference of opinion as to the proper treatment of pneumonia. In general, bleeding is well borne, and attended with the most decidedly beneficial effects. Some practitioners, however, attempt to manage the disease by diaphoretica, blisters, &c., without resorting to depletion by the lancet or leeches; cases treated in this way, are more protracted, and also more frequently terminate fatally. Regard, undoubtedly, is to be paid to the opposite forms which it assumes, and the difference in the anatomical character of its several stages. But we speak of the disease, as it usually prevails, and its early stage. A severe attack of pneumonia, if not treated early by active depletion, will soon assume a typhoid type, in which bleeding is out of the question. Hence we reason, that we have so much of *typhoid pneumonia* in the practice of some physicians; the typhoid symptoms being the result of improper treatment.

Dr. B. extols the plan of Laennec, in treating pneumonia, that is, by giving large doses of antimony, such as six grains in the course of 24 hours, gradually increased to one scruple. Our author states that he has employed this treatment for the last 12 years, and believes it suitable, with certain modifications, in individual cases, to every form and stage of primary pneumonia. Of 61 cases thus treated, in which the disease was simple, three died, and fifty eight recovered. He thinks mercury may be useful in the typhoid forms of the complaint, but that its direct influence in arresting acute inflammations of parenchymatous organs, is more than doubtful, although he admits its value in similar affections of serous and sero-fibrous tissues. We have made full trial of the different modes of

treating pneumonia, in an extensive dispensary practice, and we confess we are not convinced that the tart. antimony practice, will prove as successful, as the depletory by general and local bleeding. In our hands it has not proved satisfactory, and we believe this is the experience of most practitioners. In typhoid cases, mercury, opium, and counter irritation, with wine, quinine and ammonia, are recommended by Dr. B.

Phthisis Pulmonalis.—This term is very properly limited by Dr. B. to cases, where tubercular matter is found in the lungs. Under the microscope, tubercle is seen to be composed of three elements:—

1. An amorphous, transparent stroma, which reacts chemically like coagulated fibrin. —

2. Minute granules, some of which consist of at, some of protein compounds, and others of earthy salts.—

3. Corpuscles, generally about one third the size of pus-cells—and which are imperfectly developed cells. In recent firm tubercle, the amorphous stroma and cytoblasts predominate; the latter being often closely clustered together. In soft tubercles, they are generally further apart, and less numerous, whilst the granules are greatly increased. Tubercular matter, therefore, contains the elements of nutrition in a degraded form, and may be considered as a product of abnormal nutrition, in which an abortive attempt at organization has taken place. As the same kind of matter is secreted in some forms of typhoid fever, and in scrofula, phthisis is now considered, like these diseases, to depend on a peculiar derangement of the constitution, called the tubercular diathesis. We know not in what this consists. Some pathologists state that in the early stages of the disease the blood contains less fat than in health; Andral has detected an increase of fibrin relative to the number of blood corpuscles; but this change belongs to all inflammatory diseases. Simon supposes that this change may be accounted for by the acceleration of the circulation which usually takes place soon after the disease has set in; by which means the blood corpuscles are consumed more quickly in the lungs than they are formed in the chyle, thus causing a disproportion between them and the fibrin. The tubercular diathesis is evidently connected with an aæthemic state of the system.

Development.—Tubercular matter is never seen in any other than the solid form. Vogel supposes that it is secreted from the capillary vessels in the fluid form, and that it afterwards fills up the interstices of the tissues in a manner too perfect to be accomplished by any substance that was not

originally fluid. It may be considered to be formed from an amorphous fluid blastema, like pus and other morbid products, and in three ways.

1. Directly from the fluid blastema, as a single product. Then the smallest grains of tubercular matter have, not unfrequently, the same appearance and ultimate structure as the larger masses, being yellow and opaque, and having the granular elements numerous in proportion to the corpuscles.

2. Other products may be simultaneously formed with it from the same blastema. Such as Lymph, &c.

3. It may be preceded by the formation of other products of abnormal nutrition, such as a gray semi-transparent matter, which occurs under three forms:

1. Small roundish tumors, called granulations. 2. Masses, surrounding cavities. 3. Considerable sized masses inclosing a few yellow tubercles. The first two are very common. Louis states that he hardly ever met with a case of yellow tubercles without the presence of gray granulations. The gray masses are doubtless the result of chronic inflammation. They consist of coagulable lymph, incapable of reaching the degree of organization attained by that thrown out in more active inflammation, and occurring in a sthenic state of the constitution. The gray granulations are considered by Louis and Laennec as tubercular; the first stage of yellow tubercle. Carswell regards them as formed of inspissated mucus in the air-cells, frequently inclosing a portion of tubercular matter. Andral considers them as air-cells thickened by inflammation, as do also, Alison, Williams, and others. Vogel, Lebert, and Bennett describe them as composed of the same elements as yellow tubercle. Dr. B. considers the gray matter to be an imperfectly organized substance, which, in the absence of the tubercular diathesis, may remain stationary, or may rise slightly in the scale of organization, but which, under opposite circumstances, may descend in the scale, and be converted into, or displaced by tubercular matter. In this sense it may in some cases be the first stage of tubercle, but not a stage, as supposed by Louis and Laennec, through which tubercles must necessarily pass before acquiring their own peculiar character, nor must it necessarily be followed by tubercle. How yellow tubercle is developed in the midst of the gray matter, is unknown. Whether it is deposited as a nidus, in the same manner as earthy salts are deposited in atheroma, or whether the gray matter is transformed into it as lymph is converted into pus. Both suppositions may be reconciled with our present knowledge. Thus, if we suppose tubercle to be deposited in the gray matter, this process must be

the result of an increased tubercular diathesis, whereby a blastema highly charged with tubercular matter is thrown out. But if the gray matter after remaining a certain time is transformed into tubercle, it must be in consequence of diminution in the activity of the metamorphosis of tissue, by the force of which it had been hitherto kept from descending in the scale of organization. It is well known that normal tissue cannot be directly transformed into pathological formations, which arise out of an amorphous blastema. Gray matter is not, however, normal tissue, but an imperfectly organized substance. Both tubercle and gray matter are protein-compounds, of the transformations of which we are as yet ignorant, so that there is nothing improbable in the notion that the one is transformed into the other. It is probable that the deposition of tubercular matter in the lungs is always preceded by local congestion. Vogel considers it to result from the same causes as fibrinous dropsy generally; and to be preceded by local hyperæmia of the precipitating capillaries. Andral states that the pre-existence of congestion may be admitted, but cannot be demonstrated. As to the vexed question, whether the action which accompanies the deposition of tubercle be inflammatory or not, pathologists are divided in opinion. If by the term inflammation, be understood pain, heat, redness and swelling, or the presence of lymph or pus, then tubercle is not inflammatory. If, on the other hand, we consider the essential phenomenon of inflammation to be an increased exudation of blood-plasma, then tubercle must be regarded as an inflammatory product. At any rate its deposition depends on a peculiar asthenic condition of the system, called the *tubercular diathesis*, and is preceded by *local hyperæmia*.

Causes of Tubercular Phthisis.—These may be regarded as two-fold—the one including the tubercular diathesis; the other favoring the development of tubercles in the lungs, after this constitutional derangement has taken place.

Of the former class of causes, Louis has shown that the greater number of these have been admitted on insufficient data: and in this conclusion, our author also argues. M. Louis admits as causes of the tubercular diathesis, *lymphatic temperament, female sex, and continued febrile action*: he rejects as special causes, bad food, impure air, depressing passions, and other debilitating circumstances; but allows them to be causes of a variety of diseases, of which, phthisis is one. He excludes *climate and temperature, trade and occupation, delicacy of constitution, and inflammations of the thoracic viscera*. Dr. B. states that his observations fully confirm the influence of *temperament, sex, and continued febrile action*: but they further

tend to prove, that some causes, which are only allowed by Louis to act generally, are, in fact, special causes of phthisis. These are *mental and physical depression*. Among these latter, the *Influenza* of 1887, occupies an important rank. This disease was not accompanied by long continued febrile action, but it was characterized by extreme depression of the nervous system. Dr. B. states that a great number of cases of phthisis seemed to owe their origin to an attack of this disease; and occurred in persons who had previously been in good health, and presented no traces of strumous diathesis. *Chlorosis*, also, is often followed by phthisis; and the same remark will apply to gonorrhea, and syphilis, which the author attributes to mental depression, consequent on the disease. The influence of hereditary transmission is stated not to have been strongly marked, in the cases which fell under the writer's observation. In regard to the influence of trade and occupation, Dr. B. states that facts go to prove, that the development of the tubercular diathesis is not induced by any particular mode of employment, but that, amongst those in whom it already exists, the deposit of tubercular matter in the lungs is sometime precipitated. The results of pleuritis and pneumonia, as observed by Dr. B., tend fully to confirm the opinion of Louis, that inflammation of the thoracic viscera do not induce the tubercular diathesis. It is obvious, however, that inflammation of any organ may induce constitutional derangement, by impairing its functions, and thereby interfering with the formation or purification of the blood, to which the proper performance of such functions may be essential. In this way, inflammation of an organ concerned in the process of primary assimilation, may indirectly favor the development of the tubercular diathesis.

Exciting Causes.—All causes which determine the blood to any particular parts of the body, must, says Dr. B., facilitate the deposition of tubercle in those parts, if the tubercular diathesis previously exist. The principal are *age, cold applied to the surface of the body, suppression of the menses, certain forms of fever, inflammation of the thoracic viscera.*

Termination.—Some writers have contended that phthisis pulmonalis, always necessarily terminates fatally; others, admit the possibility of a recovery, but believe such cases to be rare; while others still, maintain that cases of recovery from the disease are very frequent. It is well observed that if solid whitish nodules, of the consistence of condensed cellular tissue or fibro-cartilage in the lungs, are to be considered as denoting the previous existence of tubercular deposit, the disappearance of tubercle must be allowed to be a very common occurrence. But it is worthy of notice, that

these appearances are found in the lungs of persons who have never exhibited the slightest symptoms of phthisis, and it is highly probable that they are often the result of plastic pneumonia. It is the opinion of Andral, that unless a bronchial ramification can be traced into these substances, the pre-existence of a cavity can not be deduced. But this is rarely the case. Calcareous matter is not unfrequently found in the lungs; but it has not yet been demonstrated, that these deposits have always been preceded by tubercular matter. As we find calcareous deposit taking place around fibrinous concretions within the heart, and around coagulated lymph in other parts of the body, so the same may take place in the lungs, without such lymph being connected with tubercles. The fact, however, is well established, that tubercular matter may be deposited in the lungs, and be replaced or surrounded by matter of cellulo-fibrous, fibro-cartilaginous, or calcareous consistence, without having inflicted any notable injury on the health; but whether recovery ever takes place after decided signs of tubercular deposit have been manifested in life, remains to be proved. Many cases have occurred, where, after unequivocal signs of solid deposit have been manifested at the summit of one lung, either the physical signs of disease have disappeared, and complete recovery taken place, or else, in which some chronic catarrh alone has remained, &c. But there is no evidence in these cases, that tubercles have been deposited. The physical signs may have been owing to consolidated lymph. That tubercular disease of the lungs is often arrested, or prevented by appropriate treatment, no one can doubt. Cases of this kind are given by our author.

Treatment of Phthisis.—The treatment of this disease may be classed under two divisions; 1st *empirical*, consisting of certain *specific* remedies; 2d *rational*, founded on what we know of its pathology, causes, &c. We need not dwell upon the specifics recommended in former years, as they have not stood the test of experience, and are obsolete. *Naptha* has more recently been introduced as a specific, but is not likely to meet with a more fortunate result than the former. It was employed in 50 cases by Dr. B. where there were evidences of cavities in one or both lungs, but without the slightest benefit. In 50 cases where there were evidences of solid deposit in the summit of one lung, or both, it seemed to improve the tone of the digestive organs in some cases, but, on the whole, the disease was not arrested in a single instance, and tubercular softening came on as rapidly as in cases where it was not given.

The author has been more successful with *cod liver oil*, having, also, used it in 100 cases, 12 of which, in the incipient stage decidedly improved;

confirmed cases were greatly relieved; in 5 it was obstinately rejected from the stomach; in 11 it purged, and could not be taken. On the whole, although not a specific, yet it may be usefully given in certain cases, conjoined with a judicious system of regimen and diet.

Three plans of treatment have been employed in phthisis, viz: the *antiphlogistic*, the *expectant* and the *tonic*. The antiphlogistic was advocated by Broussais, and subsequently by Dr. Stokes, who endeavors to prove that it is the only mode of arresting the disease in its early periods. In carrying out this plan, bleeding, general and local, is freely employed at the outset of the disease, followed by counter-irritation and mercury. This treatment is founded on the erroneous belief, that tubercular deposit in the lungs is the result of acute inflammatory attacks of that organ; a doctrine now generally set aside for that advocated by Louis, and others.

The *expectant* treatment is now resorted to by a large class of medical practitioners; consisting in a regulated diet, attention to exercise, and bathing, with the occasional use of expectorant medicines, etc. Its chief characteristic lies in the means which are taken for preventing exposure to cold, and guarding against irritations of the lung.

The *tonic* treatment has also numerous advocates among the ablest members of the profession; consisting in regularity of habit, appropriate exercise, pure air, suitable food, the use of bitters and chalybeates, cold bathing, etc. The chief object of this treatment is directed to improve the constitution generally, and thus remove the tubercular cachexia, at the same time not overlooking the local disease, which is, for the most part, treated with sedative medicines, and very moderate local depletion, occasionally by counter-irritation, and mild mercurials. But these remedies are to be so selected and administered, as not materially to lower the system, and thus interfere with the primary object of the treatment.

It is now generally conceded that the deposition of tubercle in the lung, is invariably preceded by an altered state of the constitution generally; and that, consequently, the principal object of treatment should be the improvement of the constitution. This constitutional derangement, moreover, is of an asthenic character, a kind of chronic, typhoid state. It is true, that in a certain stage of the disease, the condition of the blood resembles that found in inflammatory affections, but then such inflammations are as frequently of an asthenic as of a sthenic character, and do not call for antiphlogistic measures. The nature of the disease, then, fully proves, that the invigoration of the system by nutritious and tonic regimen

and diet, is the best means of fulfilling the primary object of treatment, the correction of the tubercular diathesis.

The known causes of the disease indicate the same course of treatment. The general causes are all of a debilitating character; and the same may be said of the special causes, moral and physical depression, febrile attacks, uterine derangement, &c., &c., all of which require a tonic and alterative course. It is true, there is great irritability often associated with this debility, demanding the use of sedative remedies in connection with tonics. By this means the irritability of the lungs is relieved, while, at the same time, the general strength is not diminished. In applying these principles to the prevention, removal and palliation of phthisis, circumstances occasionally occur, which require that the plan of treatment should be somewhat modified; such as the use of counter-irritants, and topical bleedings.

Prevention.—The prophylactic treatment of consumption can not be commenced at too early an age, whether there be a predisposition to the disease or not. Our author recommends that where the complaint has existed in the mother's family, or where she is in a delicate state of health, a wet-nurse should be provided, and maintained in good health by nutritious diet, regular exercise in the open air; frequent ablutions of the baby, and living in large, well-aired apartments. Meat-tea is to be allowed the infant, even at the breast. Should it not acquire the average degree of plumpness, or its flesh be pale and flabby, under its judicious use, infants will often be restored from a state of marasmus to vigorous health. Too much can not be said in favor of frequent exposure to the open air; the clothing should be moderately warm, thin flannel being next the skin, so arranged as to leave the body unconstrained, and to allow of the free movements of all its parts. The surface of the body is to be habitually washed and rubbed; cold water is generally to be employed, though at certain seasons the chill should be taken off. That which is applied to the head should be always cold, in order to prevent congestion.

The restlessness, and other symptoms of cerebral disturbance which occur about the period of dentition, are best relieved, according to our author, by mild medicines, such as a few drops of syrup of poppies or morphia, at the same time favoring the passage of the teeth by incision of the gums; and he remarks, that Louis has shown the groundlessness of the dread entertained by many of the sedative medicines producing congestion of the brain, or arresting the development of the intellectual faculties of infants. While these means are pursued, we are to watch closely any indications of a tendency to tubercular deposit in any part of the body.

At this period of life, the brain and its membranes, the peritoneum, and the glands of the mesentery and neck, are more often the seat of tubercular deposit. When the brain is the part affected, evidences of meningitis are present, and this is to be treated by mercurial purging, rather than general or local bleeding. Tubercular peritonitis will often be relieved by mercurial and opium frictions combined with mild nutritive diet, so prepared as to be easily digested. Tuberculization of the glands of the mesentery, causing marasmus, is to be treated by a combination of alkaline and alterative medicines, with some mild sedative; uniting farinaceous food with the liquid parts of animal flesh—iodide of potassium and cod liver oil, are the only remedies recommended in these cases. The same general plan is advised in combating the ordinary acute attacks of childhood and youth, employing antiphlogistic measures as sparingly as possible, and trusting rather to mercury and antimony as depressants. At the age of puberty, attention is to be directed to the generative system. Cautions given as to indelicate practices, like masturbation. Too close application to study, and sedentary occupations are to be carefully guarded against, while out-door exercise is to be constantly attended to. By these measures the integrity of the digestive organs will be preserved, and while these perform their healthy functions, there is slight danger of an invasion of phthisis.

In the advanced stage of the disease, certain symptoms occur, which it is important to be able to palliate at least, if we can do no more. To allay vomiting, iced drinks, opium, liquor potassæ, hydrocyanic acid, and naphtha are recommended; diarrhoea, generally dependent on ulceration, is to be combatted by starch and anodyne injections, kino with quinine, &c. Cough will be relieved by morphia; and when convulsive, by small doses of hydrocyanic acid. When accompanied by excessive secretion from the bronchial tubes, the decoction of senega is often very serviceable. Tannin is recommended for night perspirations when other means fail. The dyspnoea is sometimes greatly relieved by nitric ether and sal volatile. Inhalation has not been found very useful in the hands of the author. In this respect our own experience leads us to a more favorable estimate of its merits.

We have thus given a pretty full analysis of Mr. Blakiston's work; which, although not strikingly original, is nevertheless characterized by good sense, and sound, practical judgment. The cases, which are very numerous, are succinctly detailed, and highly instructive. We cheerfully bear testimony to the practical value of the work, and trust it may meet with a wide circulation.

C. A. L.

ART. V.—*The Human Brain: its Structure, Physiology and Diseases: with a description of the typical forms of brain in the animal kingdom.* By SAMUEL SOLLY, F. R. S., senior assistant surgeon to St. Thomas hospital, etc., etc. From the second London edition, with one hundred and eighteen wood engravings. Philadelphia. Lea & Blanchard, 1848. 8 vo. pp. 496.

The first English edition of this work, was published in 1836. The present American republication, is of the second edition, which has been very recently issued in London, and has not only been revised by the author, but large additions have been made, especially to the departments of physiology, and diseases of the brain.

One half of the volume is devoted to the structure of the brain. The author's investigations in this department, have been conducted upon the plan enunciated in the following quotation from the preface:—

"The only philosophical method of simplifying and giving a character of general interest to the anatomy of the human brain, is by commencing with the structure and functions of the nervous system in the lowest and simplest forms of animal existence, rising by degrees to the highest, carefully observing each addition of parts, and the relationship borne by these to an addition of function. By pursuing this course, we shall be rewarded by finding that the encephalon, this apparently most complicated organ in the human being, is but a gradual development from an extremely simple fundamental type on one uniform and harmonious plan, and that the seeming complexity of the cerebro-spinal axis in man, really arises from the great concentration, as opposed to the extreme diffusion, of its component parts in the lower order of animals; for in no particular are the higher orders more strikingly distinguished from the lower than in the concentration of function within circumscribed spaces."

Every philosophical student must appreciate the great advantage which has been derived from adopting a method of examining and describing the brain, different from that heretofore pursued, and still followed in most systematic works on anatomy. The latter consists in dissecting from the superior surface of the hemispheres, downward, by removing the cerebral substance in successive slices. This, as the author remarks, is rather a destructive, than a dissecting process, and has doubtless retarded, instead of promoted knowledge of the structure and functions of this portion of the organism. For conclusive evidence of the superiority of commencing dissections of the base, (the merit of which, Mr. Solly attributes to Gall and Spurzheim,) and proceeding by unfolding parts, so as to discover their natural connections and relations, the reader has only to consult this work. He will also be equally convinced of the great advantage and interest which the study of the human brain has derived from comparative anatomy,

by tracing the successive developements of the nervous system, from the simplest function in the bodies of animals, through the several gradations in the scale of organization, up to the summit, as exemplified in man.

Mr. Solly proposes, also, some changes in nomenclature, which, to say the least, serve to diminish, in no small degree, the complexity of the pursuit in this particular. Without professing to have given this portion of the work that close attention which its merits claim, and which we intend to bestow upon it hereafter, we have no hesitation in saying, that it is the most complete, and scientific treatise with which we are acquainted, and, as such, we commend it most cordially to those who wish to become conversant with all that is now known, or may be rationally conjectured respecting this most interesting and important portion of the human fabric.

The part devoted to the physiology of the brain, occupies but a few pages. The author, however, very judiciously, in the anatomical division of the subject, connects with the description of parts, his views of their respective functions. The physiological chapter, therefore, contains only a *resume* of physiological facts, previously presented in that connection. The following quotations embody the author's opinions respecting the functions of the more important components of the cerebral structure:—

"In the course of our observations of the composition and properties of neurine, and on the essential elements of a nervous system, the following fundamental principles have been established, and need only be adverted to in the present section.

1. That vesicular neurine is the source of power.
2. That medullary neurine is the conductor of it.
3. That medullary neurine is also the conductor of those impressions which call forth the power of the vesicular neurine.
4. That the vesicular neurine is collected in masses of variable form and size—the *ganglia*.
5. That the medullary neurine is moulded into cords and bands—the *nerves* and *commissures*.

"The *spinal cord* is a series of ganglionic centres, structurally homologous and functionally analogous to the jointed ganglionic cord of the articulates, and although we are unable to point out any corresponding anatomical lines of demarkation between them, they are as functionally distinct as the auditory, optic, and olfactory ganglia of the brain.

"The *medulla oblongata* consists of three ganglia on each side of the mesial line—six, therefore, in all. The olivary bodies, most probably the lingual ganglia, the restiform or pneumogastric ganglia, the posterior pyramidal bodies or auditory ganglia. The olivary ganglia are connected with the rest of the cerebral ganglia by means of the olivary commissures, and the important office of these ganglia, if my hypothesis is correct, that they preside over the consensual movements of the tongue, as an organ of speech, explains the reason of such a perfect communication with the rest of the encephalon. Between the pneumogastric ganglia and the brain the

commissural communication is not so distinct, and there does not appear to be the same physiological reason to expect it.

The auditory ganglia are imbedded in the sensory tract; but undoubtedly some of these fibres which we have heretofore considered as belonging solely to this system of nerves, must be regarded as belonging to that system of longitudinal commissures which we have seen so distinctly carried out in the brain."

Of the *Cerebellum* he says:—

"There can, I think, be little doubt but it is a regulator and co-ordinator of muscular action on the one part, most probably by means of the central portion of the cerebellum, viz., the superior and inferior vermiform processes. On the second part, it certainly would appear to hold some relation to the generative function. The pathological and other facts adduced by Drs. Gall, Vimont, and Broussais, on this subject, are very striking, and almost as conclusive as all other physiological evidence.

The *locus niger* in the crus cerebri is the next ganglion for our consideration: it is the serial homologue and analogue of the anterior peaks of gray matter of the spinal cord. It is, I suppose, the seat of the excitomotor power of the third pair of nerves, the importance of which in relation to the instinctive and conservative movements of the eyeball need not be insisted on here.

The *tubercula quadrigemina* or optic tubercles, we may fairly conclude, are the instruments by which the physical impressions of light received by the retina are converted into sensations of light, color, form, &c.

The optic thalami and corpora striata, or anterior and posterior cerebral ganglia, are the next in rotation. With regard to the office of these nervous centres, we have already had occasion to consider the thalamus as the essential ganglion of the sensory tract, as the corpus striatum is of that of the motor tract. And I am quite disposed to adopt the ingenious and philosophical theory of my friend, Dr. Carpenter, as enunciated in his review of Mr. Noble's work in the October number of the British and Foreign Quarterly Medical Review for 1846.

The anterior and posterior cerebral ganglia are regarded by Dr. C. as forming part of the series of sensorial centres, of which we have seen other members in the olfactory, optic, and auditory ganglia. That they are independent centres of action, not mere appendages to the hemispheric ganglia, appears from the large quantity of vesicular neurine which they contain; and that the corpora striata are so, further appears from the absence of any correspondence in size between them and the hemispheric ganglia. Thus in fishes, we find that the corpora striata make up the principal bulk of the second pair of masses; in reptiles, birds, and the lower Mammalia, they still form a very large portion of that which is commonly termed the cerebrum; and their subordinate aspect in man and the higher Mammalia is solely due to the large relative development of the hemispheric ganglia. On the other hand, there is scarcely any rudiment of the thalami optici to be discovered in fishes; their proportional size increases in reptiles, birds, and the lower mammalia; but it is only in man that their dimensions approach those of the corpora striata. The peculiar connection of the thalami optici with the posterior columns of the spinal cord, and their great development in man, suggest the idea that they are the ganglia

of *tactual* sensation; whilst the connection of the corpora striata with the anterior column indicates their relation with the motor function. The very close relation between the thalami optici and the corpora striata—corresponding, as Messrs. Todd and Bowman have suggested, with that which exists between the posterior and anterior peaks of gray matter in the spinal cord—harmonizes well with the fact that the greater number of muscular movements are directed by common sensation; whilst the special connection established by the inter-cerebral commissure between the corpora striata and the optic ganglia (tubercula quadrigemina) explains the peculiar influence of the sense of light in directing certain classes of muscular actions. The communication which is formed by the medullary substance of the cerebrum between these ganglia and the hemispheric ganglia seems to be the medium by which *sensations* are transmitted to the latter, to become the stimulus of intellectual operations, and by which the influence of *volition* is transmitted downwards to excite muscular motions through the corpora striata.

The whole chain of sensory ganglia is regarded by Dr. C. as not only the instrument by which sensations are received, but also as the centre of those *automatic* muscular movements which differ from those of a simple reflex character, in being dependent upon sensation. To this head, he refers the purely *instinctive* actions of the lower animals, as well as a variety of actions performed by the human being, both in health and disease; such as the consensual movements of the eyes, the regulation of the laryngeal muscles in the production of vocal sounds, the convulsive movements in hydrophobia, brought on by the sight or sound of water, &c. &c. And he considers the actions which become automatic by *habit*, as executed through the same channel; each movement being directly prompted by the sensation with which it has become associated.

We come lastly to those important ganglia which crown and cover in the rest—the hemispherical. If there is one point in the physiology of the brain more unequivocally demonstrated than another, it is that these ganglia are the instruments of the mind—the portion of the brain in which sensations are converted into perceptions, and give rise to ideas. Comparative anatomy: developmental anatomy: experiments on living animals; observations on its size and form, as indicated by the size and form of the skull; and last, but not least, pathology,—all afford a mass of overwhelming evidence that this portion of the brain, and this only, is the cerebral organ of intellectual power.”

Mr. Solly is of opinion, that there is much truth in phrenology. He discusses the correctness of this opinion at some length. The following quotation, contains a summary of the reasons which lead him to think favorably of that science.—

My reasons for believing that there must be a great deal of truth in phrenology are fourfold. First, I have received from practical phrenologists, and especially the late worthy Mr. Deville, such accurate characters of individuals known to me, but unknown to them, that I cannot believe the accounts I received could be the result of accident and conjecture, which must have been the case if phrenology is untrue.

Secondly. Phrenology alone—as it appears to me—can account for all the varieties of insanity, especially monomania.

Thirdly. The facts which have been collected by the late Mr. Deville, showing that the brain will alter its form at any period of life.

Fourthly. The existence of longitudinal commissures.

The diseases of the brain occupy more than two hundred pages of the work. These are arranged under the following heads:—1. anæmic affections, 2. hyperæmic, 3. convulsive, 4. organic.

The author adopts the views of Dr. Burrows, with respect to the circulation within the cranium, and gives extended extracts from Dr. Burrow's work, noticed in the last number of this Journal.

Delirium Tremens, he classes among the anæmic affections of brain. As some qualification of this opinion, it should be stated, that he applies the term *delirium tremens* exclusively to cases in which delirium supervenes upon sudden withdrawal of alcoholic stimulus. Those cases in which delirium occurs during the use of stimulants, and as a direct consequence of their use, he distinguishes as *delirium ebriosorum*. The latter he considers quite a different affection, involving irritation and congestion of the brain. We quote a paragraph in which the circumstances marking the distinction are mentioned:—

It is impossible to give in words, all that distinguishes these two diseases; they must be seen frequently to be appreciated. But the following will assist in their diagnosis. The head and skin generally is cool and moist in *delirium tremens*, dry and hot in *delirium ebriosorum*. The pupil varies in both according to the stage: in the early stage of both it is generally contracted, in the latter stage dilated. The conjunctiva injected and red in *delirium ebriosorum*; the reverse in *delirium tremens*. The mental derangement in the former is more allied to an exalted, excited state of intellect; in the latter it approaches fatuity and depression. The tongue is generally pale and furred in *delirium tremens*, sometimes unnaturally clean and red; in *delirium ebriosorum* is usually dry, and sometimes brown, but this is no certain guide. The pulse is most uncertain, for as all inflammatory affections of the brain are depressing in their effects on the heart's action, so do we find that the pulse is not hard and wiry in the hyperæmic affection, which, however, never amounts to one acutely inflammatory. Still, on the whole, there is less power in the beat of an artery, and that more varied in *delirium tremens* than in *delirium ebriosorum*."

Mr. S. treats cases of *delirium tremens* on the stimulant plan. *Delirium ebriosorum*, of course, according to the author's pathology, is aggravated by stimulants, and requires depletion, carefully practiced.

The subject of *Anæmic Coma* is next treated of. We regard this as one of the most important subjects in practical medicine. The coma occurring in the course of diseases productive of exhaustion, particularly in children, is still, we fear, treated, by many practitioners, as an affection

requiring depletory measures. We commend the facts and principles presented under this head to the careful consideration of the reader. Our limits will not permit us to present an analysis of them, nor to notice the remainder of the work, except to enumerate [the subjects of which the author treats. After anaemic coma follows ramollissement. He then proceeds to speak of hyperaemic affections. Under this head he considers inflammation of the hemispherical ganglion, in other words, the cineritious or vesicular element of the brain's structure, and inflammation of the meninges. *Apoplexy* falls within this division, which is considered at considerable length. *Convulsive Affections* follow next in order, and epilepsy. Lastly *organic diseases of the brain*.

The portion of the work devoted to diseases of the brain contains much that the practitioner will find both interesting and profitable. After what we have said respecting the portion of the work treating of anatomical details, it will, perhaps, be proper to add, in this connection, that the foregoing opinion is based upon a careful perusal of the portion occupied with diseases.

In conclusion, we feel confident that we do not overrate the merits of this book when we pronounce it one of the best of the many which have lately emanated from the medical press.

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Epidemic Cerebro-Spinal Meningitis.—The following summary of facts which have been communicated in different journals, respecting the above singular epidemic, is presented by Dr. Condie, in an annual Report on the diseases of children, read at a stated meeting of the College of Physicians of Philadelphia. The Report is published among the *transactions of the College, from April to August, 1848, inclusive*. These transactions, a summary of which is issued semi-annually, are amongst the most valuable of the contributions to the medical periodical literature of this country, and it were much to be desired that other Medical Associations would pursue a similar course, first, in providing for stated reports on subjects embraced in the different departments of medical and surgical science, and, next, in their publication for the benefit of the profession at large. We shall avail our-

selves, in behalf of our readers, of other extracts from the present "summary of transactions," as we have done heretofore with respect to other numbers.—EDITOR BUFFALO MED. JOURNAL.

"In the *New Orleans Med. and Surg. Journal* we find two communications, the one from Dr. B. F. White, of Whiteville, Tennessee, and the other from Dr. B. J. Hicks, of Vicksburgh, Mississippi, describing an epidemic which occurred in their respective vicinities during the past year, the identity of which with the epidemics of Cerebro-spinal meningitis that have prevailed in different portions of Europe, is rendered evident by the similarity of the leading symptoms, the class of patients who were chiefly its subjects, and the lesions of the brain and spinal marrow discovered in the examinations after death made by Dr. White.

In Tennessee, the disease made its appearance, towards the close of February, in the region of country extending along the Hatchie river from Bolivar to Estanaula. It was principally confined to children between the ages of six and fifteen years. The attack was ushered in by a sensation of chilliness, followed by moderate heat of the surface, and pain, commencing between the shoulders and extending to the occipital region, with rigidity of the posterior cervical muscles, retracting the head considerably backwards. Delirium supervened in an hour or two, with contraction of the pupils of the eye, or sometimes dilation of one pupil and contraction of the other; ptosis of the eyelids; ecchymosis under the eyes and on the surface of the body; rigidity of the abdominal muscles; spasmodic twitchings of the flexors of the extremities, and a disposition to a constant motion of the legs from side to side, alternately. There was difficulty in expanding the lungs, respiration chiefly through the nostrils, constipation, and sometimes retention of urine. Stertorous breathing coming on, death soon closes the scene. The disease runs its course in from fifteen to seventy-two hours. Dr. White has known one case in which the disease was protracted to the twelfth day.

Almost every plan of treatment was tried—bleeding, emetics, cathartics, cold douche, cupping, mercurials, blisters, followed by opium, quinine, and stimulants. Every case in which the attack commenced with symptoms of extreme violence terminated fatally. Three-fourths of the patients fell victims to the disease. Towards the last, however, as is the case in nearly all epidemics, the disease, to a certain extent, assumed a less malignant form.

Dr. White conceives that the change of the blood by the lungs becomes suspended, and that death is produced principally from *asphyxia*.

The disease commenced in Vicksburg about the 10th of January, 1846, and continued until the close of March.

The patients were attacked with groaning, muttering delirium, chilly sensations, pallid countenance, cold extremities; these symptoms were soon followed by restlessness, flushed countenance, frequent pulse, wild and frantic expression of the eyes, and hot and dry skin. The patient screamed violently when touched or spoken to, was unable to answer questions correctly, to locate the pain or indicate the suffering organs.—Whilst sleeping, alternate pallor and flushings of the countenance were often observed, and violent inflammation of the right or left eye was not an unfrequent occurrence. On the second or third day the spinal muscles

became very much contracted and rigid; in some instances to such an extent that the patients had considerable difficulty in swallowing even fluids; there was at the same time a loss of power in either the right or left upper and lower extremities, followed by convulsions of great severity, instantly excited by touching or raising the inferior extremities. There was no evidence of lesion of the biliary or digestive organs; the urinary secretion was unnaturally copious and pellucid.

There was absolute regularity in the period at which the various symptoms appeared; in some cases the tetanic symptoms were observed as early as the first day of the attack, and in others not until as late as the tenth. In many of the violent cases, within six hours after the patients were attacked, *petechiæ* of large size made their appearance upon the arms, over the eyelids, and upon the inferior extremities. These *petechiæ* disappeared on the fourth or fifth day, if the patients were not sooner cut off. In the most violent cases, death ensued on the fifth day of the attack; in other instances they survived from thirty to fifty days. But few cases recovered after the tetanic symptoms presented themselves. The mortality amounted to about 50 per. cent. on all attacked.

Blood-letting, stimulants, and anodynes were found equally unsuccessful. In vigorous constitutions, blood-letting, in the onset of the attack, followed by an active mercurial cathartic, was often of great service. In patients of a more delicate constitution, cupping along the whole length of the spine and early vesication were preferred. Revulsives to the extremities and iced cloths to the head, with the internal exhibition of the following, in table-spoonful doses every two hours, were found to be of advantage, *R.* Pulv. gum. camp. 3j.; Potass. tart. antimon. grs. ij.; Mucil. gum. acaciæ, 3vj.; *M.*—An enema composed of 3ij. Spir. terebinth., 3ij. tr. assafetida, and half a pint of thin starch, was administered morning and evening, with a view of tranquilizing nervous distress and keeping the bowels gently open.

The following was found to be the most beneficial tonic, after the violence of the disease had abated, for relieving the inertia of the nervous system, which occurred in every instance of recovery. *R.* Iod. ferri ʒj.; Iodin. grs. viij.; Iod. potassæ, 3ij.; Syr. sarsapar. ʒiv.; *M.* Given in doses of a tea-spoonful every four hours, in a little water. It should be continued for some days, unless found to produce gastric distress; in which case some mild bitter vegetable infusion should be substituted.

We are presented with the post-mortem appearances in a single case examined by Dr. White. The body was not emaciated, a half an inch of fat covered the abdominal muscles. The posterior integuments of the head were swollen; both pupils dilated; on removing the calvarium, a considerable amount of blood flowed from the sinuses of the dura matter. The arachnoid membrane adhered with moderate firmness to the surface of the convolutions; whilst removing the brain from two to three ounces of clear transparent serum escaped from the ventricles. The brain appeared heavier than usual. The surface of the convolutions was much flattened. The base of the brain bore evident marks of inflammation. The membranes covering the medulla oblongata and the cerebellum, the right lobe more especially, were thickened and opaque, adhering, likewise, pretty firmly to the fissures of Sylvius. The membranes at the base were unusually vascular, but the substance of the brain itself was not much altered in color or in consistence. The membranes, more particularly around the

third nerve of the right side, were thickened and more vascular than natural. On examining the superior surface of the brain, and separating the two hemispheres, they gave way inferiorly, from a softness of the lower part of the middle lobe of both hemispheres, and of a considerable portion of the corpus callosum. The corpora striata were slightly injected, and softened, particularly that of the right side. The lining membrane of the ventricles was not altered in color.

On dividing the vertebræ, a considerable quantity of fluid blood gushed out, the moment the interior of the canal was reached. It appeared to be perfectly flooded and engorged. The membranes were evidently thickened and highly vascular. The spinal marrow was not altered in appearance, but, if anything, somewhat softer than natural. The substance of the marrow itself was not injected.

The viscera of the thorax presented no appearance of disease.

The liver was perfectly engorged with blood—an incision being made through its structure, the blood could be squeezed from it as from a sponge. Its weight was 5½ pounds. The gall bladder was distended with a quantity of thick, black, bilious matter. The spleen was large, but contained little blood in comparison with the liver.

The kidneys were congested but otherwise healthy. The intestines contained a quantity of thin greenish matter. There were a few spots of ecchymoses in the lower two-fifths of the ileum. The small intestines contained a few large worms. The alimentary canal was otherwise healthy. The urinary bladder bore no mark of disease.

Dr. Hicks gives also an account of the post-mortem examination in one case, but it is so deficient in detail that nothing satisfactory can be derived from it.

The same form of disease prevailed also, during the last year, at Rochepoort, Boon county, Missouri. In a letter addressed to Professor Dunglison, (*Medical Examiner*, Vol. 10, p. 604.) Dr. W. C. Phillips, thus describes the disease as it appeared in the last mentioned locality.

It occurred in persons of all ages, but most commonly in children from 10 to 15 years. The first indication of an attack was often a pain in the hand, foot, arms, legs, eye, brain, lungs, stomach or bowels. Sometimes one, or at others a number of these locations at the same time, were primarily affected. In some cases there was a sensation as of cords drawing at the back of the neck, producing stiffness. In one case, there was a contraction of the occipito frontalis, and of the muscles of the face. In many instances there was so much soreness of the surface as to render the smallest amount of clothing intolerable. The disease was usually ushered in with a chill, of variable intensity, succeeded by a re-action, differing in intensity, and this re-action was followed, in from 3 to 12 hours, by a second chill. In many cases there was excruciating pain in the arms, legs, and other parts of the body, and this pain, when located in the limbs, was often accompanied with swelling of and stiffness and inability to move the joints and more or less loss of the use of the limbs. The pains were sometimes permanent, but at others, shifting from one point to the other. The neck was often drawn backwards or forwards to an angle of about 45° from its natural position, and so rigidly fixed, that it would break short off before it could be forced to resume its proper position—it was at the same time, considerably swollen. The external surface was

sometimes beautifully spotted; in a few cases there was an exanthematous eruption. The disease was attended by either: profound coma, wild and furious delirium, subultus tendinum, apoplexy or paralysis. In one case there was blindness of one eye, accompanied with permanent pain in the head, and swelling of the joints. The lungs may or may not be implicated. The stomach was often affected with nausea and vomiting. The bowels were not particularly affected. Trismus occurred in one case. In other cases there was an inability to swallow anything, from the swollen and painful condition of the larynx pharynx.

Five-sixths of the cases terminated fatally.—In many instances the fatal event occurs almost at the very onset of the disease; in general, death takes place in from six to twenty-four hours.

Dr. Phillips gives no account of the lesions detected upon a post-mortem examination.

Extraction of Urinary Calculi by a Novel Method.—Dr. PARRISH exhibited a specimen of round white calculi, varying in size from a pin's head to a small pea, which had been extracted from the bladder through the eye of a simple flexible catheter of medium size. The whole number withdrawn in this way was about forty, two or three coming away at a time, and generally without pain. As the case furnished some points of unusual interest, Dr. P. stated the history of it, as derived from the patient himself; whose views as to the manner in which these calculi were formed, as well as to the proper method of extracting them, are novel and interesting.

The patient, William Hembel, Esq., President of the Academy of Natural Sciences, is well known to many of the Fellows as a gentleman of varied scientific acquirements, who, although not one of our profession, has devoted much time to medical investigations. He is now past eighty years of age, and has been for some years more or less subject to attacks of painful and difficult urination, from an enlarged prostate gland; this distressing malady has, within the past eighteen months, been considerably aggravated, so that he has been obliged to rely altogether upon the use of the catheter in evacuating the bladder.

In the early part of the present year he suffered to an intense degree, and did not derive the accustomed relief from the use of instruments. The urine was highly ammoniacal, and deposited a large quantity of ropy mucus. In this condition it occurred to him, that a considerable portion of acrid urine, mixed with mucus, must settle down in the bas-fond of the bladder, beyond the reach of the catheter, as ordinarily introduced; and hence that only a portion of its contents was evacuated, the rest remaining behind as a source of renewed irritation. A reference to the anatomical arrangement of the parts confirmed this view, and induced him to resort to a simple expedient to remedy this difficulty. The catheter was introduced by the patient himself in the erect position, and all the fluid contents of the bladder evacuated through it; but, before withdrawing it, the body was bent forward, and the free extremity of the catheter slightly elevated, so as to throw the point of the instrument into the portion of the bladder below the symphysis pubis, at the same time that the palm of the hand was placed between the thighs, in order to allow the fingers to press upon the perineum; gentle motion was now made upon this part, with a view of

elevating the depending portion of the bladder, and of thus throwing the mucus which might have settled there, into the eye of the catheter.

By thus striking the perineum, ropy mucus, having an ammoniacal odor, was discharged in considerable quantity, to the great relief of the patient, and fully confirming the correctness of the course adopted. This expedient was successfully resorted to at the close of each operation with the catheter, a portion of mucus always appearing after the urine had been evacuated. It was on one of these occasions that the patient discovered on withdrawing the catheter, that it was blocked up with several small round calculi, which had been thrown into the eye of the instrument, and were thus readily withdrawn without pain. In this way, the whole number of calculi have been at different times extracted; and on only one occasion did any suffering follow; this was occasioned by the calculus being too large to pass within the eye of the instrument, thus presenting a rough surface to the passage, and causing slight laceration of the urethra, with some hemorrhage.

By continuing this plan of emptying the bladder, the irritation of the organ was greatly lessened, the urine improved, and the mucous discharge gradually diminished, leaving the patient in a more comfortable condition than he had experienced for many months. He now believes himself entirely clear from the calculi, and enjoys comparative exemption from suffering, with improved health.

It is evident that the process above described, could not be accomplished with a silver catheter, or with the body in an erect position.

The practical deductions which our venerable friend draws from experience in his own case, may be thus summarily stated:

He believes that much of the suffering attendant upon the disease, (enlarged prostate) may be caused by the presence of irritating matters, which, from gravity, settle in the concavity of the viscus below the symphysis pubis, and out of the reach of the catheter when introduced in the ordinary way; this mucous secretion, if allowed to remain, forms a vehicle for the collection of solid particles deposited from the urine, and for the formation of calculous concretions. Calculi thus formed, may exist for a long time unsuspected, thus aggravating the spasms of the neck of the bladder, and increasing the incontinence of urine to a great degree. Hence, it is important, in all cases of enlarged prostate, attended with painful urination, thoroughly to evacuate the bladder, either by frequently washing it out, or by the process found so successful in the case now related. To accomplish this, the gum elastic catheter must always be employed, while the position of the body, together with the pressure upon the perineum, in the manner indicated, will be found indispensable to success. The accidental discovery of calculi in the catheter in the present case, seemed to point out the practicability of this method of extracting them, in the early period of their formation, and thus, of preventing a painful and dangerous operation, which might be rendered necessary, if this simple expedient were not adopted.

Should subsequent observation confirm the above views, it must be admitted, that an important addition will have been made to our means of treating one of the most painful diseases to which man is liable, a malady which often renders the latter period of life a season of sorrow and anguish, and causes its victim to look forward to death, as a welcome messenger.—*Ibid.*

Case of Pseudo-Membranous Laryngitis, in which the operation of Tracheotomy was performed, and followed by complete recovery. By Prof. C. D. MEIGS.

A child four years of age becoming affected with difficult and noisy respiration, was placed under the care of a homœopathic practitioner; the parents having lost already a child from croup, recognized in this, the same symptoms as were observed in the former case, and suggested to the medical attendant, that the child was laboring under that disease, but this he declared was not the case, but rather thought that the attack would turn out to be one of measles. The child, however, grew worse and worse—no eruption appeared upon the skin, and at the end of two weeks, the respiration having become increased in difficulty and attended with a distinct croupy sound; while the voice of the child was nearly extinct, the parents became alarmed and sent for Dr. Meigs. His son, Dr. J. F. Meigs, immediately saw the patient, and found it in an advanced stage of genuine membranous croup, attended with symptoms of the most violent character; and extensive deposition of membranous matter appeared to have taken place, and the case was looked upon as almost hopeless—with the view however, of affording, if possible, some relief to the extreme difficulty of breathing, the Doctor directed the application of five or six leeches to the throat on each side of the trachea. Dr. C. D. Meigs now saw the child, and considered it to be in the most imminent danger. The croupal symptoms were intense. Upon auscultation, not the slightest respiratory murmur could be detected in any part of the chest, giving the idea of an individual laboring under complete hepatization of both lungs. The air passed into the lungs with the greatest difficulty, the respiratory effort being prolonged to an extent beyond what the Doctor recollects to have ever before witnessed. The child was extremely restless, its head was thrown back upon the spine, and every moment strangulation seemed imminent. A half ounce of powdered alum was directed, and one drachm of it given to the child at intervals of twenty minutes, until emesis was produced, which did not occur until after the fourth dose. This was rather an uncommon occurrence, vomiting being generally produced by a single dose of the alum; it evidently indicated a torpid state of the nervous mass, the result of the great change produced in the blood, in consequence of the imperfect performance of the respiratory function. No nausea or prostration followed the action of the emetic.

Early the next morning found the child laboring under the most distressing difficulty of respiration; the surface, and particularly, the face, lips, and tongue, were of a blue color, and nearly all the symptoms of a state of asphyxia were present. Dr. M. considered that death was inevitable, but still, the operation of tracheotomy, though a forlorn hope, presented itself as the only possible means of relief. This was stated to the parents, who consented that it should be tried; accordingly, at 11 o'clock the operation was performed by Dr. Pancoast. After laying bare the trachea, he divided the second, third and fourth cartilagenous rings; immediately upon opening the trachea, a discharge took place of mucus, mixed with blood and portions of plastic lymph. In forty seconds, the child breathed with great freedom. Instead of inserting a tube in the usual manner, through

the opening into the trachea, Dr. Pancoast secured the open state of this, by cutting from the trachea an elliptical portion of cartilage, thus leaving an oval opening into the tube somewhat larger than that of the two nostrils; while the edges of the incision through the soft parts, were kept asunder by a leaden wire, which passing around the neck, had the hooked ends of its two free extremities inserted on each side of the wound. The next day the child was up and running about. In a few days, the edges of the incision in the neck were brought together, the wound rapidly healed, and the child, within a surprisingly short period, recovered perfectly, without a single disagreeable symptom occurring. — *Ibid.*

Angina Folliculosa of the Pharynx, (hypertrophy of the follicles of the pharynx,) by M. CHOMEL. (Translated for the Medical Examiner.)

Authors on internal pathology say nothing of this affection; even Pinel does not mention it. It is difficult to account for the silence of so many minute observers, on a disease which, although not very common, is still frequently met with by those who examine the throats of their patients. M. Chomel has collected during the past year, twenty-two cases. It is not a very dangerous disease, but is exceedingly annoying to the patient, who, for that reason, is willing to submit to any treatment.

It is characterized by the abnormal development, or hypertrophy of the follicles of the pharynx, uvula or soft palate. It may occur at any age, but is mostly to be seen in those from fifteen to thirty years old. It is also more frequent in men than in women, in the proportion of seventeen to five.

We often observe in patients affected with this disease, that there is a very peculiar shape in the superior maxillary bone. Instead of forming a regularly curved arch, it rises very rapidly from the alveolar process of either side, and meets at an acute angle at the top. In consequence of this the nasal fossæ are very much contracted, and the air passes with much more difficulty by that route; the person is obliged, therefore, to breathe more or less with the mouth. The upper lip is usually quite short, exposing the superior incisor teeth to view, and causing the patient to sleep with the mouth open.

We are particular in describing these anatomical peculiarities, says M. Chomel, because we do not regard it as a simple coincidence, but as being concerned in the production of the disease of which we are speaking.

Every organ which secretes more than is natural, tends necessarily to become hypertrophied. In order to prevent the pharynx from becoming dry, in patients with the above conformation, the follicles take on excessive action, and in that way they gradually enlarge.

The patient is often simultaneously affected with *herpes*, while many have suffered with *acne*.

Profession exercises a great influence in the development of the disease in question. In singers we see the follicles very much enlarged sometimes without causing any inconvenience; in that case it cannot be considered a morbid affection. The mucus membrane may even be thickened and red without being diseased. There is no desire to expectorate during the act of singing, but after returning home, or ceasing for a time to sing, secretion takes place freely.

In most cases the disease comes on very gradually, and, after arriving at a certain stage, is very troublesome to the patient. It often begins with a slight cough, accompanied with expectoration just like an ordinary catarrh, which it is supposed will soon get well and requires no attention. When the secretion has become very great, however, it is very troublesome. Some persons say that the attack has been, in them, very sudden.

The disease evinces itself first, by a disagreeable sensation in the back part of the throat; the patient makes painful efforts to swallow or expectorate the mucus lodged at the top of the air passages; he is forced to drink small portions of water to relieve the painful irritation, and does in reality succeed for a short time in this way.

In mild cases, on depressing the tongue with a spoon, several small, round, red points about the size of a millet-seed may be seen. At this stage the follicles are not very prominent, but at a later period they are larger and in the form of disks, in shape like a small lens; sometimes they are ovoid. In other instances, or where the disease is farther advanced, these hypertrophied patches are elongated, and form a projecting tumour, in other cases again, the whole surface of the pharynx is covered with these patches, leaving small points here and there, where the mucous membrane is in its natural condition.

The alteration in the follicles is not always proportionate to the intensity of the symptoms; that depends upon the impressibility of the patient.

It is not unusual to find the surface of the follicles covered with a thick, adherent mucus, which the patient must first remove by coughing or gargling, in order that we may see the extent of the lesion.

The disease is essentially chronic, sometimes it disappears of itself, or yields to the most simple remedies; at others it is stubborn, and resists all the remedies we can use.

The prognosis is not at all grave; it never endangers life, but often obliges the patient to change his profession. The exercise of the voice constantly aggravates the symptoms; the lawyer is obliged to turn magistrate, and the singer to devote himself to instrumental music.

The cough is guttural; it does not come from the chest, neither does the mucus, which is not generally large in quantity; it is in the form of a globule, about the size of a pea, very tenacious and semi-transparent. Occasionally, especially in the morning, the diseased surface is covered with black points, which alarm the patient very much, because he fears phthisis. These points are merely little points of carbon, which are emitted by the lamps. To the physician they are of no moment.

The voice is changed, and as this is an accompaniment of phthisis, many persons are very much frightened by it, particularly students of medicine; but the remaining symptoms, and the examination of the throat, remove all doubts on this point.

Speech is tiresome, and it is for this reason that the patient commonly comes to consult the physician. Reading aloud is very fatiguing, and the patient cannot continue it long at a time. Sometimes a very tenacious mucus collects, which prevents the person from speaking at all for a short period.

Singers notice that in singing they have lost one or two notes, and their voice is less clear and sweet.

On examining the throat, the mucous membrane covering the palate is found to be redder than usual; this redness is not uniform. There are small red points which increase in number as they approach the uvula; these same red points may be observed on the half-arches of the palate; but it is in the pharynx that the disease is most marked.

The diagnosis is by no means easy; there are individuals, however, whose fauces are so sensitive that it is exceedingly difficult to examine their throats. It is best to frequently repeat the examination, and not to confound the morbid enlargement of the follicles with their natural development which exists in lawyers and singers and demand no treatment.

The treatment is accompanied by many difficulties. Cauterization is the most convenient and the most efficacious, but it is not easy sometimes to limit the caustic in its action, so as not to perforate the mucous membrane. The best caustics are the nitrate of silver, the nitrate of mercury, or nitric acid diluted with three parts of water and applied by means of a sponge.

We cauterize, in this way, the whole surface, both healthy and diseased. If the tumours are small, they may be touched several times, at intervals of three or four days. In this way we get the action both of a caustic and astringent, and sometimes will cure our patient.

The caustic we have just mentioned should not be used, as a general rule, until milder remedies have failed. We should first have recourse to borax or alum, as a gargle, in solution, (fifteen grains dissolved in a tumbler full of water;) this will suffice sometimes to restore the parts to their natural condition; mostly, however, it only relieves the patient for the time being.

The sulphur waters of the Pyrenees and Enghier, are frequently employed with success, those of Enghier especially, in consequence, doubtless, of the sulphate of lime which they contain. M. Chomel advises to drink two glasses of this water in the morning, gargling with it first, and then swallowing it by mouthfuls, so as to give the parts a sort of local bath. In the summer season this may be combined with baths and douches on the neck. Reading aloud, and talking, must be avoided. The diet must be moderate. All acrid, stimulating food, such as is prepared with butter, or fried, and all vegetables and green fruits should be avoided. Lastly, it is necessary to reduce to powder, or soften such aliment as is very hard—such as crusts of bread—so that it shall not scratch and irritate the fauces when swallowed.—(*Revue Medico-Chirurgicale, from the Gazette des Hopitaux.*)

Injurious effects of Tobacco, Tea, and Coffee.—Clinic of Prof. PARKER.—A man aged 35 years, has been troubled with palpitation of the heart two years; temperate habits, drinks tea and coffee, and chews tobacco; bowels slightly costive; tongue somewhat furred; pulse nearly natural; some dyspeptic uneasiness in the gastric region. The pulsations were greatly increased by mental or physical excitement, or exercise. A careful examination could detect none of the physical signs of organic disease of the heart. This case said Dr. Parker, is very interesting to the student and young practitioner, as it finely illustrates a large class of similar ailments, in which a correct diagnosis is of the greatest consequence in reference to the treatment.

There we have such a train of ordinary symptoms, embracing long continued palpitations, and these uniformly increased by mental excitement or physical exercise, that, without the aid of auscultation and percussion, it would be impossible to deny the existence of true organic disease of the heart. But if hypertrophy existed, there ought to be increased fulness of the left side; the apex of the heart ought to be found on a line outside of the nipple, or more than three inches and a half from the centre of the sternum; the hand, when placed over the heart, ought to receive the impression of being distinctly lifted up by the heart's pulsation; and there would be dulness on percussion, and absence of the respiratory murmur over a larger space than natural. Again, if the semilunar valves were diseased, application of the ear over the junction of the cartilage of the third rib with the sternum, should elicit the abnormal sounds belonging to that disease; or if the mitral valves are affected, placing the ear over the apex of the heart should elicit a similar result. There, however, we have none of these results; and hence, we may conclude with much certainty, that all the cardiac disturbance is purely functional, depending on derangement of the digestive organs,—and this again depending on the free use of *Tobacco, Tea, and Coffee*, and too much confinement within doors. What, then, are the indications of treatment? Shall we give physic in such a case? Will physic cure bad habits? Not a bit of it. Let the patient, simply, throw away his *Tobacco*, his *Tea*, and his *Coffee*; adopt a plain and wholesome diet, and take regular exercise in the open air, and he will soon be well;—in a word remove the *causes* of derangement, and the effects will cease. Dr. Parker here alluded to the fact, that much less medicine is now given by well educated physicians than formerly; and to the erroneous supposition that this was owing to the influence of some modern theories. Nothing, he said, could be further from the truth; on the contrary, it is owing entirely to the increase in our knowledge of disease, and especially to our more precise and certain means of diagnosis. For it may be laid down as a general rule, that the more certain and accurate is our knowledge of the nature, extent, and existing stage of disease, the more perfectly shall we adapt our remedies to the precise objects to be accomplished, and, consequently, the less will be required. While so long as our ideas of the nature, extent, and location of disease are confused and uncertain, so long shall we be prone to increase the quantity and variety of our remedies, with the hope that some one of the number will hit the disease. And lucky will he be, who, under such circumstances, does not hit the patient instead of the disease.—*Annalist*.

Poisoning by Arsenic successfully treated with Calcined Magnesia. By EMORY BISSEL, M. D., of Norwalk, Conn.

Peter Galpin, a labourer, aged 27, a powerful and robust young man, of intemperate habits, attempted suicide on the evening of the 24th of March last, by taking arsenic. As is often the fact, he was prompted to the deed by those horrors and remorse of conscience which so often succeed a debauch. The quantity taken, as nearly as could be determined, was not far from a scruple. When I was first apprised of the fact, two hours had elapsed from the time it was taken. I hastened the messenger who came

for me as quickly back as possible, with some thirty grains of sulphate of zinc—in two doses—with directions to administer it as soon as he could reach home, on horseback—distance about one mile—to give the second parcel in ten minutes, if needful. I followed as expeditiously as I could; when I arrived he had vomited freely twice, but without any relief. The family had given him copious draughts of a weak infusion of tobacco, which produced no other effect than to increase his sufferings, which at this time were extreme; so much so, that he begged me to kill him at once, if I could not end his pain in any other way. His pulse was one hundred and thirty per minute, small and wiry. He complained of great constriction and dryness of the fauces, but chiefly of a most agonizing pain and burning in the stomach; it seemed, as he expressed it, “as if it were filled with burning coals.” As nearly three hours had now elapsed, since the poison entered the stomach, I considered that any further effort to evacuate it would be futile, and that if life was saved at all, it must be by the antidotal power of some medicinal agent. Having had my attention directed to the experiments of Prof. Peter, of Transylvania University, and the case of Lepage, published in the January and April number of this Journal, in 1847, I determined to give the calcined magnesia a fair trial, and accordingly put it up in drachm doses, to be given every hour, mixed in milk and water. During the hour I remained with him, his symptoms were rapidly becoming more unfavorable. The pulse was one hundred and fifty per minute, the constriction and dryness of the fauces extreme, the whole surface bedewed with perspiration, the pain and burning sensation in the stomach seemed augmented to the highest possible degree, whilst the right hand was entirely paralyzed; in short, every thing betokened a speedy dissolution. I left him at 10 o’clock in charge of the mistress of the family, whom I knew to be an intelligent and faithful nurse. On visiting him the next morning, instead of finding him dead, as I much feared, I was very happily surprised to find him very quietly dozing in an easy chair. I learned from the lady, who had been unremitting in her care of him during the whole night, that in a very few minutes (not more than five or ten) after taking the first dose of magnesia, he said he felt much relieved, and before the time came for the second dose, he had fallen into a doze. She stated that each successive dose had produced the most surprising and marked mitigation of every symptom, and that long before morning he was entirely freed from suffering, and had, on the whole, passed a quiet and comfortable night. The bowels had moved freely and easily twice during the time. He complained of nothing save a general weakness, and a sort of faintness at the pit of the stomach. The right hand had recovered its power, and the pulse had fallen to eighty-five per minute. Directed to continue the magnesia, through the day, once in four hours, and to give light nourishment. On the sixth I made my third and last visit, as the young man seemed to require nothing but nursing, and a little time, for the recovery of his strength. I have since learned, that in a very few days he resumed his labor upon the farm, and felt no inconvenience from what he had taken, except a muscular weakness of the lower extremities, which was not very great. The case, in some of its aspects, much resembles that of Lepage, especially in the prompt and efficacious effects of the remedy, and the speedy recovery which followed. Should future cases yield results as gratifying as these two we may, indeed congratulate the

profession in the possession of a sovereign and prompt antidote, always at hand and easily administered, to the dreadful poison by which such numbers of our race have found a terrific and agonizing death.—*American Journal of Medical Sciences.*

Use of Anæsthetic Agents.—Quite a revulsion of opinion seems to have taken place in England in regard to the use of anæsthetic agents. The editor of the *London Medical Gazette*, in an editorial article (No. for July 16th, 1848,) commenting on the case of Mr. Badger, (noticed in our last number, p. 84,) remarks:—"The deceased was a healthy, muscular young man, who, according to the testimony of his father, had suffered from no difficulty of breathing, or any other apparent disease. The inspection of the body, however, revealed a diseased state of the heart and liver, although not sufficient to account for sudden death. Hence we arrive at the conclusion that a young and healthy-looking person, whose appearance and previous habits of life would create no suspicion of the existence of latent organic disease, may still be in such a condition of body that the respiration of the vapor will operate upon him like a fatal poison. It is not here as with a liquid or solid taken into the stomach—the poison enters at once into the circulation, and penetrates through the whole of the system; and but a few minutes elapse between apparently perfect health and the death of the patient. The circumstances under which the poison is administered do not, in these unfavorable cases, admit of the application of any remedy. The attempt to abstract blood has uniformly failed. Art is powerless in dealing with the poisonous effects of this vapor. It may be said, and we doubt not the truth of the statement, that hundreds, nay, thousands of persons, young and healthy-looking like the deceased, have inhaled this vapor without any such disastrous effects following. We have, however, heard of some very narrow escapes, even where precaution and skill of the best kind had been employed in its administration; and doubtless the experience of many of our readers will furnish them with cases corroborative of this remark. But the death of only one person in a thousand, when the vapor has been skillfully administered—and there was nothing in the patient's aspect or account of himself to induce the operator to withhold his consent to its employment—becomes a most serious matter. There should be some extraordinary advantage or benefit to the individual to justify such a fearful risk; but the advantage, if any, in reference to the dental art, is the alleviation of pain merely for a few minutes; and the naked question now to be considered is, will any operator feel himself justified, after the case of Mr. Badger, in employing this dangerous vapor for the annulling of pain in the extraction of teeth? If latent disease of the heart or liver could always be clearly diagnosed in a patient, we should not be called upon to put this question: but as Mr. Badger's case proves that a most experienced man like Mr. Robinson saw nothing about the deceased to justify his refusal to employ chloroform, it is clear that the most skillful dentist may be working in the dark, and thus unconsciously be the means of sacrificing life for the sake of humoring a patient by annulling a degree of pain which every healthy adult should be able to bear. The facts of this case have, however, a bearing far beyond dentistry. We consider that our remarks apply to all the minor operations of surgery."

The editor of the *Medical Times*, in an editorial article, (Number for 22d July, 1846,) uses still more decided language in regard to the use of anæsthetic agents.

"The fate of chloroform," he asserts, "is sealed, at least so far as relates to its employment in minor surgical operations. The deaths which have occurred to persons under its influence, both in England, France, and America, have incontestably proved that it is a medicine which cannot be administered without great risk. Anæsthetic agents may be fairly said to have had their day, and henceforth they will cease to be employed, either in surgery or midwifery, except under peculiar circumstances, and by persons of more than ordinary courage. The law, up to the present time, has not interposed to stop the perilling of human life by the inhalation of ether and chloroform: but another death or two will rouse it into action, and surgeons, under whose sanction these agents may hereafter be administered, will be exposed to the danger of a prosecution for manslaughter.

"The great experiment has now been fairly tried, whether patients about to submit to surgical operations can be rendered insensible to pain by certain agents, and their lives not perilled. For a time all seemed to promise well, and the first death which occurred, was attributed to some other cause than the administration of chloroform or ether. The scientific world was unwilling to admit that agents apparently so valuable, should possess attributes which would prevent their general employment. Thus brandy, rather than chloroform, was stigmatized with the guilt of Hannah Greener's death: and the druggist's apprentice, who expired after inhaling the anæsthetic agent, merely to produce a momentary pleasure, was said to have given up the ghost for the want of breath, his face being enveloped in the napkin from which he inhaled the much-loved gas. Facts, however, have since accumulated, which forbid us to doubt that, under certain circumstances, death will follow the exhibition of chloroform and ether.

"Could these circumstances be clearly ascertained beforehand by the surgeon, all difficulty would vanish, and science would be justly proud of the discoveries of Morton and of Simpson. Pain, however, seems as yet to be indissolubly linked to human nature, and science has labored in vain to produce its extinction. Chloroform and ether, which appeared for a season to be two of the most important gifts ever given to man, have proved, to some, fatal poisons—penetrating in an instant the whole system—attacking the vital energies, and compelling them to yield to death, though apparently uninjured previously by disease.

The way in which anæsthetic agents are introduced into the system, renders the resources of our art powerless in any attempts to counteract their poisonous influence. In no single instance that we know of, has the effort to abstract blood been successful; nor are we disposed to imagine that much good would result from bleeding, if the venous and arterial currents were not completely stagnated. Blood appears to lose those characteristics which are essential to life, assuming a dark color in the arteries, while the fluid in the veins becomes mixed with air. This latter circumstance has been noticed in nearly every fatal case, and is a phenomenon which as yet has not been satisfactorily accounted for. In the case of the French female, M. Gorré, the surgeon who administered the chloroform, endeavored to account for the presence of air in the veins, from the possibility of its being introduced at the time of performing the operation,

which was only that of opening an abscess for the extraction of a foreign body. Like a zealous friend of anæsthetic agents he suggests the idea that the patient died from this cause, and not from the inhalation of chloroform. M. Velpeau, with great propriety, controverts this opinion, as death appears to have actually taken place before the operation was commenced; yet he advances an opinion equally as improbable as that of M. Gorré, viz., that, as the autopsy was not performed till twenty-four hours after death, putrefaction might have been the cause of the air in the veins.

"In the American case, though the body was not examined till twenty-four hours after death, putrefaction could not have been the means of generating the gasses found in the sinuses of the dura matter, as in the month of February, in Cincinnati, the temperature of the air is not sufficiently high to produce decomposition sufficiently rapid to generate gasses in the veins even of a person who died in the midst of health.

"Looking over the cases, we are led to conclude that the quantity of chloroform exhibited has very little to do with the fatal results. In Mr. Robinson's patient, a drachm and a half only was placed in the apparatus; in the American case, there was probably not more administered; while the patient of M. Gorre had only placed upon the handkerchief fifteen or twenty drops.

"In all the fatal cases, death occurred without any previous signs of disease. Had the patients presented anything unusual in their appearance, it is likely that the surgeons would have detected it; and it is this circumstance that renders the administration of chloroform so dangerous.

"Hence it becomes the members of the medical profession to use with the greatest circumspection, anæsthetic agents. In the minor operations of surgery they are now inadmissible, and even in the great operations, it becomes an important question whether the risk incurred will justify their employment.

"Since writing the above remarks, on looking over the *Gazette Medicale* of the 15th of July, we find a case recorded of a corpulent young man, twenty-four years of age, admitted into the Hôpital Beaujon, on the 25th of June, and who suffered amputation of the thigh, in consequence of a gun-shot wound. The patient inhaled the chloroform, and before the operation was concluded, sensibility appeared to be returning, when M. Robert, the surgeon, ordered some more chloroform to be inhaled; within a quarter of a minute the respiration became stertorous, the face and lips pale, the pupils dilated, and the head fell upon the shoulder. Powerful friction, and irritating the pituitary membrane seemed for a moment, in this case, to produce signs of returning sensibility. She patient, however, soon expired.

"Here, again, the surgeon was willing to suppose that the anæsthetic agent was not the cause of death, but rather the peculiar condition of the patient from the gun-shot wound which he had received. Be this as it may, the fact is now established that anæsthetic agents cannot be employed without, in many cases, endangering the lives of those who are placed under their influence."—*Medical News*.

EDITORIAL DEPARTMENT.

BIBLIOGRAPHICAL NOTICES.

On the Causes and Treatment of Abortion and Sterility: being the result of an extended practical inquiry into the Physiological and Morbid conditions of the Uterus, with reference especially to Leucorrhœal Affections, and the diseases of Menstruation. By James Whitehead, F. R. C. S., Surgeon to the Manchester and Sæford Lying-in Hospital. Philadelphia, Lea & Blanchard, 1848. 8 vo., pp. 368.

One hundred and fifty pages of this work are devoted to Menstruation, considered physiologically and pathologically. The signs of Pregnancy are next considered, occupying forty-six pages. Next, follows the subject of abortion, statistics with reference to various points, and full consideration of the causes. Lastly, *Sterility, its causes and treatment*. Without containing much that is new, the author, from the extensive opportunities of investigation which he has enjoyed, and of which he appears to have availed himself industriously, has contributed a body of facts, important in their bearing upon various interesting topics, and which go to establish certain points with greater precision than previous investigations had done.

The concluding chapter on sterility, is, practically, the most valuable portion of the work. As his remarks on the cause of sterility which, in his opinion, is the most frequent, do not cover an extended space, we transfer them to our columns:—

“Chronic endo-uteritis, or what may be called irritable uterus, is, in fact, one of the most frequent causes of sterility. The disease generally sets in soon after marriage, in cases where it is not attributable to specific causes; and in some rare instances, there are evidences of its having existed previously. The earliest symptoms are, a sense of tension and soreness of the abdomen, aching of the loins, pain of the hypogastrium and thighs, pallor of the countenance, languor, and general *malaise*. A slight leucorrhœal discharge manifests itself; this, at first, is clear and colorless, but soon acquires a yellowish or brownish tinge, and is not unfrequently offensive. The menstrual functions are performed with suffering; the discharge appears in unusual abundance, being sometimes clotted; and the peculiar secretion characteristic of internal inflammatory action, occupies the whole interval between one menstrual period and another. The affection is accompanied with rigors and remittant fever; and there is a great tendency to peritoneal and enteritic disturbance. If the uterus be submitted to examination, its body, especially at the posterior aspect, will generally be found enlarged and painful to the touch, the cervix is unusually tense, sometimes erysipelatous, the labia are more or less thickened, and present

a vivid red, irritable-looking ring of inflammation surrounding the orificium uteri, whence issues a quantity of ichorous or sanious fluid, emitting a peculiar odor. For the most part, this fluid product differs materially in its sensible properties both from pus and the normal uterine mucus; the two latter are essentially alkaline; whereas the former exhibits an acid reaction, which property, on some occasions, upon subsequent admixture with the vaginal mucus, becomes sufficiently intense to inflame and excoriate the external parts with which, in escaping, the product is necessarily brought into contact.

The prevention of pregnancy under these circumstances, may be occasioned in three ways: *in the first place*, the inflammatory action going on within the uterus, and which is liable to be aggravated under states of venereal excitement, may prevent the formation of the *membrana decidua*, and the ovum, even although impregnated, is necessarily thrown off without any manifestation of its existence in the fertilized state; *secondly*, the diseased condition of the lining membrane of the uterus may be extended to the Fallopian canals, obliterating for the time their internal orifices, so as to oppose an insurmountable obstacle to the admission of the spermatic fluid within them, and thus to render the fertilizing effort abortive; *thirdly*, the nature of the secretion furnished by the internal surface of the uterus or of the vagina, under certain states of disease, may be inimical to the active existence of the spermatozoa, occasioning their destruction before they arrive at the extricated ovule. The conditions under which the two first propositions are capable of being verified, have been sufficiently dwelt upon already; in referring to the latter, a few brief remarks may not be inappropriate in this place.

The spermatozoa (or spermatozoides, as they have recently been termed by several eminent physiologists, who seem inclined to question their existence as independent animalcules,) are alone contained in the spermatic fluid of the male, of which they constitute the essential or fecundating property. By their non-existence therefore in this secretion, the fluid is deprived of its fertilizing influence; this may at least be reasonably inferred, as observed by Dr. Carpenter, from several circumstances, such as their absence or imperfect developement in hybrid animals, which are nearly or entirely sterile: and the fact that fecundation essentially consists in the direct communication of one of them with a certain point in the ovum. Various opinions are entertained respecting the precise point at which the two elements of germination are brought into contact; some having stated that the spermatic animalcule has been found to have traversed the whole length of the Fallopian canal, while the ovule was still contained within the cavity of the corpus fimbriatum; in other instances, their communication has been witnessed in the course of the tube, sometimes nearer its inner extremity, or even after the ovule has been deposited in the cavity of the uterus. The last-named situation, it has been contended, is that at which impregnation is probably always effected under normal circumstances; but the occasional occurrence of extra-uterine foetation proves that fertilization may take place at any point between the ovarium and uterus.

The spermatic animalcules are capable of living for a length of time in an isolated condition, their existence being prolonged or otherwise according to the nature of the media with which they are brought into contact after emission. Thus, in healthy vaginal mucus collected from females after

copulation, they are seen to move actively for several days: while the product of the same organ, or that of the uterus, in certain states of disease, will cause them to perish instantly. This fact has been demonstrated by M. Donné, who, in his experiments, employed the mucus of both these organs, separately and conjunctly, in their respective states of health and disease. At page 291 of his work (*Cours de Microscopie*), M. Donné observes: "As might be expected, the Zoospermes (Spermatozoa) live perfectly in the mucus secreted by the vagina in its normal state." "But," he proceeds in the following page, "the vaginal mucus becomes so acid in some circumstances, as in cases of congestion, irritation, or inflammation of this organ, that the Zoospermes appear to perish in a few seconds after being brought into contact with it. The same effect was also produced by the vaginal mucus secreted during pregnancy; this fluid exhibiting its acid properties in a much higher degree of intensity in the gravid than in the unoccupied state of the uterus." The latter fact I have long been familiar with, but have not had an opportunity of witnessing the effect of this product upon the spermatic fluid under the microscope. M. Donné says: "What seems to me remarkable is, that the vaginal mucus of pregnant women, has generally appeared to be inimical to the existence of the Zoosperme; and, in fact, the state of congestion which exists in these parts during pregnancy, is that under which the acidity of the vaginal mucus ordinarily becomes very decided." He appears to be unaware of the fact, however, that the secretion of the vagina and that of the uterus, in their healthy condition, are essentially different in their chemical properties; hence the conclusion arrived at by him respecting the cause of the phenomenon in question;—a conclusion which I have reason to believe to be erroneous. It is highly probable that the same proportion of the acid component is eliminated by the secreting apparatus of the vagina, both during pregnancy and at other times; the remarkable difference noticed in the two states, being determined by the presence or absence of a powerful modifying agent—the uterine mucus, the formation of which is necessarily suspended during pregnancy. I have before endeavored to show on testimony of experiment, that uterine mucus in its healthy state, exhibits an alkaline reaction, while that of the vaginal secretion under like circumstances, is always acid; and although in the product resulting from their combination, the latter generally appears as the predominant property—constituting in fact the distinguishing characteristic of this fluid; nevertheless the tendency of their union is constantly towards neutralization; consequently, the highly acidified state of this product can only result either from withdrawal of the uterine mucus, as during pregnancy, or from change of its properties by disease. We have here then within easy accomplishment—if M. Donné's statement respecting the destructive nature of the changed secretion should hereafter be found correct and of general application—a means whereby satisfactorily to elucidate the pathology of sterility, in some women at least, as well as several other important phenomena connected with this branch of physiology, which have heretofore been considered inexplicable upon scientific principles. But to proceed.

In reference to the effect produced upon the vitality of the seminal fluid by contact with *uterine mucus*, M. Donne remarks at page 294: "Generally speaking, the Zoospermes brought into contact with uterine

mucus, do not appear to experience any deleterious influence, even when this product has lost its state of purity, and become more or less purulent." "But," he proceeds, "certain kinds of uterine mucus, kill the animalcules with the greatest rapidity; thus, while they continue lively and active for several hours in the secretion taken from one woman, they appear to perish on the instant, and to lose entirely the power of motion, in that taken at the same time from another person; the experiment being performed under like circumstances in both cases." This author considers that the deleterious action exercised by certain mucous products of the uterus upon spermatozoa, is to be attributed to the excess of alkali which the secretion appears to contain in some women, or in some states of disease. I am inclined, however, to question the validity of this statement; having grounds for believing that the condition most frequently and most powerfully effective in preventing fecundation, is that under which the secretion becomes endowed with a property precisely the opposite of that which he assumes to be peculiarly deleterious.

I look upon the statements of the author just quoted, in addition to results obtained in the course of my own observations already noticed in several parts of this volume, together with others to be presently adduced, as constituting a body of facts of no mean importance in the study of physiology and morbid changes of the uterus. It should be borne in mind, to reiterate the circumstance, that uterine mucus, both in its healthy state, as well as under certain morbid conditions, exhibits an alkaline reaction. This I have ascertained by experiment more than a hundred times repeated. Its tendency is to modify the opposite quality possessed by the mucus of the vagina. But in chronic endo-uteritis, and perhaps in other forms of disease also, its nature is entirely different, and instead of the salutary change which, under normal circumstances, it operates upon the product with which it becomes incorporated, an effect the opposite of this is produced. If vaginal mucus therefore, in the highly acidified state in which it is found when deprived of its other component, be proved to be inimical to the existence of the spermatozoa: it is not unreasonable to infer that the same deleterious property will also be possessed by it when the uterine secretion is withheld from other causes; and its nature will be still more energetically destructive in those cases wherein both are possessed of similar properties."

The work concludes with reports of several cases illustrative of the efficacy of treatment in conformity with the pathological views enunciated in the foregoing remarks. As the consideration of the subject is not complete without an account of the local therapeutical measures which the author recommends, we make the following extract from another portion of the work relating to that point:—

"The treatment consists in the application of leeches to the *hypogastrum*, or over the upper part of the *sacrum*; and in the exhibition of remedies similar to those employed in CASE XXI. In addition, when all febrile excitement has become completely subdued, a more decidedly tonic plan will probably be indicated; and considerable benefit may be derived from injecting within the *uterus*, a weak solution of nitrate of silver in combina-

tion with *extractum conii*;* or by the introduction of an ointment of the same material.† The latter form of the remedy is applied by means of a small piece of lint fixed upon the end of a long probe, and fastened to the handle of the instrument with a thread, with a view of securing its safe withdrawal. Not only does no disturbance or discomfort of any kind ensue upon the employment of these local measures; but, on the contrary, a beneficial change is often evident after the first application, and I have witnessed the suspension of pain to be instantaneous. The operation of injecting is done with the aid of the speculum, by means of a long syringe similar to Clarke's female syringe, having a nearly straight tube, with but one hole at its extremity. If carefully managed, from one to two drachms of the remedy, (which may be composed of different materials, varied in form and strength according to circumstances)—will pass within the organ at each operation, most of which returns almost immediately. The temperature of the fluid, previous to being used, should be raised to about ninety degrees, Fahr.

Females and their Diseases; a series of Letters to his Class. By CHARLES D. MEIGS, M. D., Prof of Midwifery, and the Diseases of Women and Children, in the Jefferson Medical College at Philadelphia, &c., &c., &c. Philadelphia, Lea and Blanchard, 1848; 8vo. pp. 670.

This, like every other scientific work, is to be regarded, critically, in a two fold point of view: first, as concerns the matter which it contains, and, second, as respects its arrangement, style, &c. In the latter point of view, it offers much room for criticism. The author, with the most praiseworthy intentions, has attempted to avoid the dullness, which, as he justly remarks, renders so many medical works tiresome and disgusting to the student. His effort has been, as he states in the introductory letter, to write with the same freedom and *abandon*, as if he were addressing familiarly any one of his pupils in his own library at home. As best adapted to such an object, he adopted an epistolary arrangement.

That he has succeeded in writing a readable work, in our estimation, we have the best practical evidence in the fact, that, in spite of a deliberate resolve to postpone its perusal, having other more pressing matters on hand, we found ourselves taking it up day after day, at our leisure moments, until the volume was finished. If we may judge of others by our own experience, the student and practitioner will find it an attractive book. This consideration, while it disarms criticism of its acerbity, does not render it blind to literary blemishes. In the author's anxiety lest he should be tedious by confining himself too closely to naked scientific truths,

* R. Argenti Nitratis, gr. vj.
Extracti Conii, ʒj.
Aquæ Destillatæ, ʒi
Misce, fiat injectio.

† R. Argenti Nitratis, gr. x.
Unguenti Cetacei, ʒss.
Liquoris Plumbi, ʒss.
Misce, fiat unguentum.

he indulges in too many digressions and irrelevances. The work becomes thereby redundant and diffusive, and much too voluminous for the amount of instruction which it contains. The force of the latter is weakened by over dilution. Some of the dialogues which are introduced, strike us as in bad taste. We should pass this judgment upon the same conversations of physicians with patients, had they actually occurred within our hearing, but as fancy sketches for the imitation of pupils, they seem to us worse than superfluous. Let the readers of the work just imagine the members of the class, to whom the letters are dedicated, attempting to enact a scene like that in which "Miss Helen Blaque, at No. —, Chestnut street," is the patient!

The diction would have suited us far better had greater simplicity been observed. There is an appearance of scholastic pedantry which implies not a little pains in the choice of words, but considering the short period in which the work was written, much elaborateness of composition was impossible. The author must have written *currente calamo*. He must, therefore, have at his ready command philological stores, to an amount which is truly surprising, but here, as in other species of wealth, a constant profusion of expenditure is to be deprecated.

The style may be characterized as excessive. As the painters say, there is "too much warmth of coloring" in it. This, the reader unacquainted with the fact that in this respect the author's writings are a true exponent of his mind, would be likely to attribute to affectation. But nothing is assumed. He writes as he lectures, and converses, to quote his own expression, "with his heart in his hand," and the earnestness and fervor which are impressed on the page, emanate from the heart. Not to extend this train of comment (the more, because we are far from making any pretensions as a literary critic,) we are free to say, that the character of the work is infinitely more pleasing to us than if written in a tame, spiritless manner, albeit, in the latter case, it were less obnoxious to criticism. We like to see the man in the book, and in the latter, as in the former, personal peculiarities, even amounting to eccentricities, sometimes are agreeable rather than offensive. The work before us, perhaps derives a piquancy from some of its faults. It shows the author to be a scholar, a man of genius, and entitled to an appellation which has conventionally a somewhat undefined, but nevertheless comprehensive and significant sense, and to which he evinces an especial partiality, viz, a gentleman. With this we leave the literary merits of the volume.

As regards matter, when it is considered that Prof. M. ranks among the most talented and learned of the profession of this country, and, we may safely add, of any country, and, moreover, that his experience in his particular province has been immense, it can hardly appear otherwise than that what he may write on the diseases of Females shall be deserving most respectful attention. But the same mental qualities which give rise to his peculiarities of style, render it necessary to make allowances for enthusiasm, and an imaginative tendency. We have surmised that some medical writers who possess the gift of racy, sparkling composition, are exposed to the danger of sometimes compromising that precision and correctness of expression so important in didactic instruction, for rhetorical point and ornament. This remark may possibly have some application in the present instance. But while we fear the work is not entitled to be considered as the best authority on all points, it is nevertheless replete with sound, practical precepts. During our perusal of the volume, we had occasion to mark several portions as containing questionable doctrine when compared with the experience and deductions of others. We leave them, however, to be particularized by others, as the present notice is not intended to embrace any reviewal of the work. Notwithstanding defects in style and matter, it is a work which will be read with pleasure and profit, and will confer honor on our national medical literature.

On Bandaging, and other Operations of Minor Surgery, by F. W. SARGENT, M. D. Philadelphia: Lea & Blanchard, 1848.

The very best manual of Minor Surgery we have seen. An American volume, with nearly four hundred octavo pages of good, practical lessons, illustrated by about one hundred and thirty wood cuts. In these days of "trial," when a doctor's reputation hangs upon a clove hitch, or the roll of a bandage, it would be well, perhaps, to carry such a journal as Mr. Sargent's always in our coat-pocket, or, at all events, to listen attentively to his instructions at home.

The book consists of five principal divisions. The first comprising instruments used in dressing, surgical dressings, irrigation, disinfecting agents, &c., &c. The new disinfecting agent of M. Le Doyen, (a solution of the nitrate of lead) is especially recommended. The second division is devoted to bandages; the third to fracture apparatus; the fourth treats of dislocations and the means of reduction, and the fifth embraces all the remaining minor operations in surgery. The volume concludes with a brief chapter on the use of anæsthetic agents, in which we have only to

complain of the injustice done to the memory of Dr. Wells, in not even alluding to his name in this connection. If Mr. Morton established the applicability of the vapour of ether as an anæsthetic agent, it is, we believe, no less certain that Dr. Wells established, *first*, the same fact in relation to the nitrous oxide gas, and it is to him, then, rather than to Mr. Morton, that the world is indebted for the discovery of the principle.—F. H. H.

Twenty-fifth Annual Report of the Managers of the New-York Asylum for Lying-in Women. Presented March 22, 1848.

The following extracts from the above report, exhibit the operations of the charity during the year:—

“It appears that ninety-five patients have been admitted during the year, two of whom did not prove proper objects of the charity. The majority of the cases have been natural—five have been deviations. The results have been favorable, although some cases assumed a threatening character; their unpleasant symptoms have yielded to treatment, and we have gratification of reporting a successful termination.

“The Board, with you, have to lament the loss of one of their active and useful attending physicians, in the death of Dr. Washington. He was a vigilant officer of this institution, seeking by his medical efforts to render it every aid, by promptly attending to its calls. We trust and hope that he has received the reward of well doing.

“The place of Dr. Washington has been supplied by the appointment of Dr. Thomas F. Cock, who has the unanimous approbation of the Board.

“Three hundred and forty-two applications have been answered in the out door department during the past year, and it is gratifying to state that, notwithstanding the neglect, exposure, and improper nourishment to which many of the applicants have been subjected, so small a proportion of deaths have been reported by the district physicians.

“For this favorable report the recipients of this part of the charity are much indebted to the promptness and skill of the gentlemen composing the district corps of medical officers. Our confidence still continues in the arrangement of our different departments, and we submit this report with increased expectations of its future usefulness.”

It appears from another portion of the report, that of *one thousand nine hundred and eighty-two patients* that have been received into the institution, from its commencement, there have been *twenty-nine* deaths.

The charity appears to be sustained by lady subscribers, the names of whom are appended to the report. We wish the report might be in the hands of every philanthropic lady of this, and other towns, so that they might be induced thereby to go and do likewise.

Yellow Fever at Staten Island, near New York.—A form of disease has recently made its appearance near the Quarantine grounds, at Staten Island, opposite New York, which was regarded by the Health Physician, and others, as *yellow fever*. We give below portions of the Report by the Health Physician to the Board of Health on the subject, and the action of the Board thereupon, by which it will be perceived, that its origin is attributed to vessels from New Orleans which had cases of yellow fever on board, and that the landing of vessels at the Quarantine ground, and cessation of intercourse by fences, &c., are interdicted. We have been assured by Dr. Stone, of New Orleans, who examined the cases, and whose ability to recognize the disease may be confidently relied upon, that its identity with the yellow fever of New Orleans is unquestionable. We learn, also, from a private source, that the characteristic post mortem appearances, as described by Louis in his essay on the yellow fever at Gibraltar, have been discovered in all the fatal cases that have been examined. Some of the physicians of New York, as is intimated, however, deny that it is yellow fever. The question of its importation, also, gives rise to difference of opinion, involving, as it does, the long mooted question of contagion, a question the negative of which we had supposed had at length been pretty conclusively settled. We trust that the Health officer will consider it as falling within his duties to publish a full report of all the facts appertaining to the occurrence of the disease, its progress, etc., for the satisfaction of the profession at large.

"At a meeting of the Board of Health, Aug. 30, a letter to the Mayor from the Health Officer, Dr. Alexander B. Whiting, was read, the principal facts of which are contained in the following extracts."

"I deem it my duty to inform you that there exists at this place, and in the villages of Tompkinsville and Stapleton, adjoining the quarantine grounds, a disease that has within a day or two past assumed the character of a malignant yellow fever. Certain symptoms and a mild form of the same disease have prevailed for a period of ten or twelve days, but not sufficiently decided to justify its designation as yellow fever by all the physicians in and about this neighborhood; but within a few days a number of cases have occurred with such definite symptoms as to leave their nature established.

"The first cases occurred in the quarantine grounds, among the boatmen employed in the health officer's barge and those of the revenue barge, and one or two engaged on the steamboat dock, contiguous to this place. Subsequently the cases occurred among persons living near the shore, in a district extending about a mile south, and a quarter of a mile in shore.

"The number of cases thus far has been about fifty. Of these the malignant cases, numbering twelve, commenced on Wednesday, the 23d of August, and have been occurring daily since. Six deaths have occurred

from among these, with all the symptoms of the disease so decided as to leave no doubt in the minds of the medical gentleman who have seen them concerning its nature.

"For the causes of the disease I think we must look to vessels from New Orleans, lying at quarantine, having had yellow fever on board. These are the barque Edgar and ships George Hews and Callander. They have been removed as far as possible from shore; sufficiently to obviate the danger from them."

A select committee of five was immediately appointed, to act in connection with the Health Commissioners, to examine into the origin and existence of the disease, and to suggest such means as they might think necessary for the Board to adopt. All communication from the city with the infected district was also prohibited. On the following morning the committee reported, at an adjourned meeting, as follows:—

"That the disease in question had its origin in the present locality to the presence of the vessels at quarantine, as named in the communication of the health officer to the board, at their meeting of yesterday. That these vessels, to wit, the George Hews, Edgar and Callander, had each arrived at the quarantine station from New Orleans, which port they left since the 26th of July. That the former had seventeen cases during the passage, of which seven terminated fatally, the Edgar lost three cases and the Callander one. That the above vessels on their arrival at our port anchored at the usual anchorage ground, which is about a quarter of a mile from shore, and that the prevailing wind during the time of their lying there had been from the north east, and blowing directly on the shore where the disease prevails.

"That the first cases of the disease were, as stated in the communication of the health officer, among the persons employed in and about the quarantine ground—and that subsequently it appeared on the shore adjacent to these grounds, in the form of a mild ordinary fever, which afterwards assumed a malignant character, and was, after a full investigation by the physicians, pronounced yellow fever. The disease, as it now exists, is confined to the shore of the island—not extending inland more than half a mile—and the length of the district affected being rather more than a mile, which district includes the Quarantine and Stapleton ferry landings.

"The number of persons on shore affected by the disease, since its appearance about a fortnight since, in its mildest form, is about 34 cases, and that of the malignant, 16—the first of which appeared on the 23d instant; and of these latter, seven have terminated fatally.

"The health officer has had the above-named vessels removed to an anchorage ground in the lower bay, more remote from the shore, and where little or no population is to be found, and ordered a large distribution of the usual disinfecting agents along the coast of the island, as far as the same is known to be infected.

"Your committee recommend a continuance in force of the resolution, as passed by the board, requiring a cessation of intercourse by means of the, usual ferry or other vessels, and they further recommend to their fellow citizens, and require from them, a strict observance of these and such other sanitary regulations as the board may feel themselves called upon to enforce."

The report was accepted, and a resolution adopted that all communication between the city and Vanderbilt's landing, on Staten Island, be for the present suspended."

Reduction in the number of daily Lectures at Medical Colleges.—

In connection with the subject of the extension of the lecture term, the inquiry arises, whether, with an extended session, it is best to diminish the number of lectures given daily. On this subject there seems to be a difference of opinion. In the annual announcement of the *Jefferson Medical College*, of Pennsylvania, we find the following remarks indicating the views of the Faculty of that institution on this point:—

In their last announcement, the Faculty of Jefferson Medical College stated, that as long ago as the year 1832 they had suggested the propriety of lengthening the Medical Session; but it had never entered into their contemplation to diminish the amount of daily instruction. The objection had generally been, that the aggregate information given during a Session of Lectures in our schools is insufficient, and that, in this respect, they compare unfavorably with those of Great Britain, France and other countries of Europe. The prevalent idea, that too much is attempted to be taught in the four months generally allotted to the Medical Session, is of more recent origin.

The time usually employed in lectures during four days in the week is six hours, and it is acknowledged in all professions, and has been especially so by lawyers from Lord Coke downwards, that six hours daily ought to be devoted to professional reading. To lecture may be regarded as synonymous with 'to read'; consequently the medical student who listens to six lectures in the day may be looked upon as having been 'read to' for six hours; and there can be no essential difference between *reading* and being *read to*, except in the circumstance, that the latter is much easier for the student. The well informed and able lecturer adapts his elucidations more readily to the comprehension of his hearers than can be done in the best books. He has an opportunity of perceiving whether he is understood; and should he think he is not, he modifies or repeats his instruction. It would seem irrational to recommend to the student of law, that because he has read six hours in the day he should repeat his reading at night; and not less so to advise that this should be done by the medical student.

It is sufficient to inculcate, that he should ponder well upon the various subjects, which have been read to him during the day; and when at a loss, that he should refer to the pages of an approved text book. In so doing he need not deprive himself of proper rest and exercise, ample time for which, as well as for the enjoyment of social intercourse with the cultivated and intelligent, will be afforded, provided his time be properly apportioned to study and recreation. A part of his evenings should, in other words, be devoted to *study* not to *reading* of which he has had enough during the day. The time for farther reading will present itself when he leaves the halls of the College, to spend the interval between his College courses."

We may state, in connection with the foregoing, that the Faculty of the Medical Department of the University of Buffalo have, as yet, adopted no definitive resolution on this subject, preferring to leave it open for action until the session commences.

Announcement of Lectures in the Cleveland Medical College for the Session 1848-9.

We quote from this circular the following paragraph:—

"The members of the Board of Instruction filling practical departments, have not only possessed advantages for making themselves familiar with the progress of medical Science and literature, but also, by an extended practice of their profession during a long series of years, have been able to mature practical views from their own large experience. Medical science and experience conjoined, will be very much divested of mere theories, and when at the command of those long accustomed to instruct by Lectures, will not fail to make a direct and permanent impressions on the minds of those desirous of becoming good Physicians.

The expression, "practical departments," which, in itself, is not very explicit, will be understood, by reference to the names of the Faculty, to apply to *General Pathology, Midwifery, and diseases of children, and of Physical diagnosis, and the theory and practice of Physic.* The reader will perhaps surmise that these chairs in some other Institutions are filled by persons less advanced in years than the incumbents of the Cleveland College.

Buffalo Hospital of the Sisters of Charity.—The building, which, for the last two years has been occupied as an Orphan Asylum, has recently been converted into a Hospital, and placed under the management of the Sisters of Charity. Very considerable alterations and repairs have been made, and for a limited number of patients (about one hundred) it has been rendered very comfortable and convenient. The building is located near Main street, a few rods from Virginia Street, being directly in the rear, and closely contiguous to the new edifice in progress of erection for the Medical College. We are happy to state that an arrangement has been made, by which students attending medical lectures at the College, will be admitted, under proper regulations, to the wards of the Hospital, for clinical instruction. The following are the regulations for the reception of patients, &c.:



1. In the admission of patients, no question shall be made as to what the applicant believes on matters of religion; and whenever a patient of any creed may wish to receive spiritual help from the minister of his religion, every facility shall be afforded for having his wishes accomplished.

2. The sick actually suffering from contagious diseases are alone excluded from the Hospital. The medical board will decide the fact of contagion.

3. The Medical board is thus constituted: Frank H. Hamilton, M. D., attending Surgeon; Austin Flint, M. D. attending Physician; Josiah Trowbridge, M. D., consulting Physician; James P. White, M. D., consulting Surgeon.

4. Applications for admission will be made to the medical board; to the president or vice president of the Good Samaritan Society, or the Society of St. Vincent of Paul; a line from the pastor of any church, of any denomination, will also ensure admission. The persons thus sending a patient will be considered as assuming the charge of paying to the hospital the minimum price for board, attendance, &c.

5. The Sisters are ever willing to admit the sick poor gratis, as far as their means will admit, but as they have no funds, no endowment, they can do but little at present, except to give gratis their time and kindest attentions; hence, the charitable who send a patient, will be responsible to the hospital for patients at the following rates:

1. For the sick poor, in the general ward, for board, washing, &c., medical attendance, nursing, medicines, &c., \$1 50 per week.

2. For those in the marine ward, the rate fixed by government.

3. For the sick who can pay for board, medicine, washing, attendance, &c., in a general ward, \$2 50 per week.

4. For the sick who are able to pay, and who desire private rooms, the charge will be \$4 per week; moderate extras would be required for extraordinary attendance, or costly prescriptions. This class of patients may select any regular physician to attend in conjunction with the attendant physician of the hospital. For medical attendance they will pay their physician according to the rules of the practice.

5. Grossly improper conduct, which cannot be remedied by milder means may cause the expulsion of any patient. The Sisters Servant, after consulting the Board of Directors, will decide on this.

6. Visitors will be admitted from 3 to 5 P. M., every day except Sunday. Relatives of the sick will be admitted at other times, according to the discretion of the Sister Servant, and so as not to harrass the patient.

Medical Department St. Louis University.—The Faculty of this Institution have added two weeks to the lecture term, commencing in October next. A new chair has also been established, devoted to *Clinical Medicine and Pathological Anatomy*. W. M. McPheters, M. D., has been appointed to this chair. Dr. McPheters is one of the editors of the *St. Louis Medical and Surgical Journal*.

Prof. H. M. Bullitt has retired from the school, on account of private and domestic reasons preventing him from becoming a resident of St. Louis.

On the announcement of this fact to the class, a series of resolutions were adopted, expressive of their feelings of regret at his resignation, their admiration of his talents, and their thanks for his ardent exertions in their behalf. Dr. R. S. Holmes, recently of the Medical staff of the United States Army, has been appointed to the chair vacated by Dr. Bullitt.

This Institution appears to be in a flourishing condition. The Faculty state in their *annual announcement* for 1848-9, that a "new and elegant medical edifice" is in process of erection.

Peoria District Medical Society, Illinois.—An admirable spirit of activity and progress appears, of late, to have been awakened among the Profession of the West. Local societies have been formed in different sections, which are well attended, and their proceedings are characterized by zeal and judgment. We have recently received, through the kindness of a friend, an account of the meeting of the District Society of Peoria, Illinois. Thirty members were present. An Annual Address was delivered, which was followed by a lecture by one of the members, and a report on the use of ether in obstetrical practice. Committees were appointed on medical inquiry, medical statistics, indigenous botany, on the formation of a library and museum, and on natural history, mineralogy and geology, to report at a subsequent meeting. Special committees on the "influence of a malarious atmosphere in the prevention and cure of pulmonary diseases," and on the utility of anaesthetic agents, were also appointed.

A good dinner, provided by the medical gentlemen of Peoria, is chronicle among the proceedings. This, albeit it may be considered last and least on such occasions, should not, in our humble opinion, be omitted, inasmuch as social enjoyments, properly regulated, contribute, in no small degree, to promote mutual acquaintance and good feeling. Some of the

District Societies in this State, we fancy, would be improved by the enthusiasm of our western brethren.

Length of Lecture Terms in different Colleges.—We copy the following from the Medical Examiner, with a few additions to the list made by us:—

Institution.	No. of Professors.	Length of Term.
Harvard, Boston,	7	Four months.
Berkshire, Mass.	6	Fourteen weeks.
Dartmouth, N. H.	6	Fourteen weeks.
Castleton, Vermont,	6	Four months.
Yale, Conn.	6	Sixteen weeks.
University of New-York,	6	Four months.
Buffalo, "	7	Twenty weeks.
Geneva, "	6	Sixteen weeks.
Albany, "	7	Sixteen weeks.
Col. Phy. and Surg."	7	Five months and a half.
University of Penn.	7	Five months and a half.
Jefferson Med. Col.	7	Five months and a half.
University of Maryland,	6	Five months and a half.
Hampden Sidney, Va.	6	Nearly five months.
University of Virginia,	3	Eight months.
Winchester Med. Col.	5	Seven months.
Med. Col. of S. C.	7	Five months.
Georgia Med. Col.	7	Five months.
Memphis Med. Col.	7	Four months.
Transylvania Un., Ky.	7	Four months.
Un. of Louisville, "	7	Four months and a half.
St. Louis. Univ. of Mo.	8	Four months and a half.
Univ. State of Missouri,	6	Four months and a half.
Ohio Med. Col.	6	Four months.
Cleveland Med. College,	6	Sixteen weeks.
Starling Med. College,	6	Sixteen weeks.

New Orleans Medical and Surgical Journal.—Drs. Fenner and Carpenter have withdrawn from the editorial corps conducting the above journal, leaving Drs. Harrison & Hester the remaining editors. The New Orleans Journal has been edited with great spirit and ability, and as the retiring editors are to continue their labors as correspondents, we hope its character and usefulness will not suffer by the change. We believe that in general, periodicals flourish best under a monarchical administration. It being understood that, as in other kinds of autocracy, the wisdom of the executive is chiefly exhibited in the success with which he avails him of the talents and labors of others.

Extension of Lecture Terms in Medical Colleges.—The editor of the *Medical Examiner* corrects a misapprehension into which we, and others, had fallen, with respect to the action of the American Association at the meeting in May last, upon the subject of extending lecture terms in medical colleges. We had been led to suppose (and it appears to have been a current impression) that, at the meeting mentioned, the association receded from its former recommendation of extending to six months, and recommended an extension to only five months. This, however, is an error. The resolution relating to this subject reported to the association and adopted, read thus:—

“*Resolved*, That this committee reiterate and strongly recommend to the Association, a practical observance of the Resolutions appended to the Reports of the Committees on Preliminary Education, and on the requisites for graduation, submitted to the Medical Convention which assembled in Philadelphia in May, 1847.”

Epidemic Cholera.—We quote from our much esteemed contemporary, the *Annalist*, the following summary of the progress of Epidemic Cholera in Europe.—

“The alarming fact is stated, that in St. Petersburg, up to the last accounts, 17,000 cases of cholera had occurred, of which, 10,138 had proved fatal. The deaths were 57 in every 100; the cures only 26 in every 100. At Moscow there had been 9754 cases, and 4,309 deaths. In various parts of Bessarabia the disease was advancing rapidly; and in Fontarabia, Bucharest, Jassy, and other places, the greatest alarm prevailed. At Jassy the deaths were at 100 to 130 per day. At Cairo it had appeared in a form of peculiar malignity. Its ravages had been confined to the city itself; and although the medical men had treated the disorder with every possible care, not one case had been saved, but every patient had died in the course of a few hours after the first attack. In St. Petersburg the disorder is now abating. It has, however, made its appearance in Berlin, where, at the last accounts, there had been four cases, all fatal. It has also broken out mildly at Vienna.

Braithwaite's Retrospect of Practical Medicine and Surgery. Part the seventh, New York: Daniel Adee, 107 Fulton street.

The half Yearly Abstract of the Medical Sciences, etc. Edited by W. H. Ranking, M.D., etc. No. seven, Philadelphia: Lindsay & Blackiston.

These valuable semi-annuals continue to make their appearance in due season, being promptly republished in this Country, and are, we believe, as acceptable as ever, to the profession.

New Medical Journal.—A medical journal has just been commenced at Columbus, Ohio, called the *Ohio Medical and Surgical Journal*, edited by John Butterfield, M. D., Professor of the Practice of Medicine in the Starling Medical College. It is a bi-monthly of ninety-six pages. Subscription price two dollars. We tender our friend, the editor, our warmest sympathies in his prospective afflictions. *Haud inexpertus loquor.*

New Work on Etherization in Child birth.—The Boston Medical and Surgical Journal states that a work on the above subject, illustrated by five hundred and thirty cases, by Walter Channing, M. D., is passing through the press, and will soon be published.

Testimony of Dr. Henry Holland, of London, respecting the Character of Medical Schools.

It is mentioned in the Annual Announcement of Jefferson Medical College, of Philadelphia, that "Dr. Henry Holland, one of the most learned and accomplished physicians of London, who visited this country a few years ago," in his evidence given before the "Committee on Registration of the British House of Commons," in answer to a question put to him by Mr. T. B. Macaulay:—"Does not the American Medical school stand high?" replied, "I should rank it next to the English on the whole." The exception in favor of the schools of his own country was a natural and proper tribute of patriotism. We are to understand its significance to be the same as when an absent person is said to have qualities superior to those of any other, "*the present company always excepted.*"

Dysentery.—We learn from various quarters, that this disease, in an epidemic and malignant form, is, at this time, extensively prevalent. It has prevailed, of late, to some extent in this city and vicinity, but in the majority of instances is mild, and easily managed. A few deaths only have occurred. The diseases of the season, generally, in this city, have been less prevalent and severe than usual.

 Subscribers, out of the city, indebted for this Journal, are urgently requested to remit their dues before the first of November. City subscribers are respectfully notified that they will soon be waited upon by a collector.

The Review of M'Lellan's Surgery will be concluded in our next number.

Buffalo Medical College.—The preliminary dissecting term in this Institution will commence on the last Wednesday of the present month.

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ORIGINAL COMMUNICATIONS.

ART. 1.—*Statement of fifteen Cases of Midwifery in which Chloroform was Administered.* By GEO. N. BURWELL, M. D.

I have administered chloroform in fifteen cases of midwifery. The time I have kept my patient, more or less continuously, under its influence has varied, in the different cases, from five minutes to one and a half hours. I shall give the cases somewhat in detail, even at the risk of being tedious; certain that by so doing, I can give a much more just idea of them, not only for comparison with other cases, but as a guide to those who may also feel inclined to administer this medicine.

The cases are susceptible of division into two classes, according to the degree of anæsthesia produced: 1st, those in which it was total or nearly so: 2d, those in which a perfect knowledge of everything going on was retained; or at least, only momentarily lost.

Eight of the cases may be included under the first division, as follows:

1. Mrs. L.—I was called at 11 1-2 P. M., Feb'y. 19, last. I heard her screams from the street, before I had entered the house. The waters had discharged at 8 o'clock, since which time the pains had been violent, and bearing down with intervals of only about three minutes. Her pulse was 100, skin warm and moist. The labia were largely swollen, dry and hot; the head had reached the inferior strait, and the vertex covered with an cedematous tumor. During the pains it was forced down so closely against the ischia, that the finger could not be passed beyond these bones; in the intervals of pain it receded so that the position could be readily made

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out. I, at first, expected to effect a rapid delivery by the free use of fresh air, and making moderate pressure upon the perineum during the pains. Finding no progress made after five or six pains, and the woman's screams so violent, I had her inhale chloroform from a small bit of sponge. Twenty or thirty drops only were poured upon it, and, covered with a piece of oiled silk, it was held to her nostrils. This amount of chloroform answered for two and sometimes three pains; no insensibility was at this time produced by it, but it had the effect of easing the pains so that she did not make so great an outcry; yet there was the same violent effort, the same rapid and forcible descent of the head against the ischia, and the same retrocession during the intervals. Forty minutes having elapsed since my arrival, and no progress made, and feeling that I could safely deliver her in a few minutes with the forceps, I sent for them, and continued the use of the chloroform to a point short of insensibility, until they were brought to me. Thirty minutes more had now been spent; and it was during this time that on the accession of pains she repeatedly called for "some more of that stuff which made such a fool of her," and which, often, was the first intimation I had of pain being about to come on.

Having her placed across the bed in a position convenient for the application of the forceps, I saturated the sponge with the chloroform, (which took very nearly a fluid drachm,) and had her breathe freely of it, and in about a minute she was fully under its effects, lying perfectly quiet, relaxed and unconscious. I had its breathing continued a few respirations, after this, while I applied the forceps, and quickly and readily delivered the head. By slight traction on this, the shoulders and body soon followed, and the womb contracted down well. She lay, in the mean time, in a full sleep, and perfectly unconscious of what was going on. There was moderate involuntary bearing down when I made traction on the head. The cord was tied and separated. On examination, the after-birth was found to be wholly within the womb, so no effort was made to extract it. Some four or five minutes afterwards, she still lying in a quiet slumber, slight traction was made on the cord by grasping it with the left hand, while the right fore-finger was carried to, or near its junction with the placenta; and the latter was found to yield, and soon came away with a number of clots of blood. Just at this moment she suddenly came to herself, and cried out, so we knew that she was awake again.

There was considerable flooding, accompanied with sharp after-pains, for which the usual remedies were sufficient. The next morning her pulse had fallen to 80. On the third and fourth days, as the milk came, it rose

to 116, and was accompanied with considerable pain and soreness in the lower part of the bowels. This condition was relieved by a dose of oil, followed by Pulv. Doveri, gr. vi, q. h. 4, warm fomentations, teas, &c. This was her third child.

2. Mrs. J.—Was called at 2 1-4 A. M. Found her having the ordinary dilating pains, with the fourth child. She is of full habit, and has a general expression of uneasiness. At 5 o'clock there was an interval of ten minutes between each pain. The os uteri dilated to $\frac{1}{2}$ inches in diameter, and grew thin, and fitted closely to the head during a pain; small bag of waters; presentation 1st vertex, and the head fairly in the cavity of the pelvis. At 6 o'clock the pains continued of good strength, causing considerable outcry during their continuance. But little progress of dilatation—V. S. to 20 $\frac{3}{4}$.

At 7 o'clock commenced the inhalation of chloroform; at first allowing but a few moderate inhalations just at the commencement of a pain, and occasionally letting a pain go over without administering it. The pains were good and the dilatation making good progress. At 20 minutes past 7, ruptured the membranes. The inhalations were now allowed to be freer. I was inclined to think that the pains were not so hard or expulsive. She certainly did not feel them much, although not yet insensible—said that the inhalations "*benumbed*" the pains. At 7 1-2, finding the head beginning to distend the perineum, I directed still fuller inhalations; that is, the sponge was kept more moist with chloroform than at first, and it was breathed a larger number of times during each pain; the head came down naturally; there was no outcry; and finally, at 20 minutes to 8, the child was born; none of the assistants or bystanders thinking her at all sensible or knowing to its birth. She then lay for five minutes or more as if in a quiet slumber. At the delivery of the after-birth she made considerable complaint, I being obliged to deliver it manually, it being caught behind the pubes. Her after-pains were rather violent, and she had some sickness at the stomach within an hour, caused by the chloroform very likely; there were no more than the ordinary lochia; no milk fever or other bad symptom to retard a perfect recovery.

She had some dizziness about the head during the day when rising upon her elbow—none if lying quiet; no headache. She thinks she had some faint idea of the birth of the child at the moment of its passage into the world. On waking from the effects of the chloroform she felt a sense of oppression, as though the room was too confined, but not to the extent of

complaining about it, or speaking of it until especially asked about her feelings.

3. Mrs. J.—On answering the summons to see her, I found her in labor with her second child; os uteri dilated; the waters escaped; and the head well advanced in the cavity of the pelvis. The pains were rapid, regular, and forcible, causing a good deal of suffering. She at once consented to breathe the chloroform, which I gave in full doses; that is, two-thirds of a teaspoonfull was poured on to the sponge; this lasted for three or four pains, when the sponge was again wet. I gave it until I noticed relaxation in her arms, as she grasped the sheet tied to the bed post; her limbs were simultaneously relaxed; the abdominal muscles continued to act, but with diminished power. Her mind was wandering; she kept calling her husband's name, thus shewing a strong contrast in this particular with the two first cases, which did not exhibit the least mental aberration, but lay as if asleep. In twenty minutes from the commencement of the administration of the chloroform, she was safely delivered without pain or suffering. Not a single untoward symptom retarded her recovery. The after-pains were very slight.

4. Mrs. D.—I was called at 9 o'clock, and found her in labor with her first child. She is twenty four years of age. Has been in pain since 5 o'clock. They are rapid, and accompanied with a good deal of apparent distress; face flushed, pulse 84 and active, skin warm. Has been very well and hearty to eat. V. S. to 18 $\frac{3}{4}$; blood buffed and moderately cupped. The pains continued sharp, but short, after the bleeding, and at the time they were on, caused strong outcries. The dilatation of the os uteri proceeded well, at 1-4 to 11 it having attained its full dilatation, and the head had become well advanced into the cavity of the pelvis. There was a disposition to doze between the pains; she would not bear down well, and was fearful and impatient. Hoping to relieve this condition so that she would exert herself more, I gave chloroform in moderate doses, principally during the intervals of pain; the pains coming on so sudden, and were so short, that I could not follow my usual plan of giving it on their accession. The pains were at intervals of five minutes. The result was not satisfactory, except in relieving her outcries. She said that she never once became insensible during the three-fourths of an hour I continued the inhalation at short intervals, nor did she think that it relieved her much.

The head had advanced, in the meanwhile, nearly to the perineum. During the next one and a quarter hours, the character of the pains did not change; she dozed when free from them, and was entirely sensible; pulse 84, regular.

At 20 minutes to 1, the head began to protrude through the vulva, causing a decided increase of suffering. The pains followed each other at intervals of only two or three minutes, and were much more expulsive in character. In ten minutes more the head engaged in the vulva without withdrawing itself during the intervals of pain, and I directed inhalation of the chloroform in a full dose. The vulva soon became greatly distended, and its edges very thin, requiring constant support to prevent the danger of laceration; thus pain followed pain for fifteen minutes, before the head finally escaped into the world. She cried out with each pain, and more during the last pain than with the others, but not to the degree she did for the ten minutes before I commenced the inhalation the last time. I supposed her, however, to be entirely sensible, and was somewhat surprised on her telling me the next day, that she did not recollect anything concerning the labor or birth of the child after commencing to breathe the chloroform the last time. She certainly, during the delivery of the head and shoulders, made quite an outcry, and bore down precisely as a woman does, not under the influence of chloroform. The child was nearly asphyxiated from having the cord once tightly around its neck, and it being kept thus tightened during the engagement of the head in the vulva. She had a good getting up for a fortnight, but then got a sore breast, which caused her a good deal of trouble. There were neither after-pains nor flooding; nor any headache nor dizziness nor other symptoms, that could by possibility be referred to the chloroform.

5. Mrs. D.—1st child. Was called at 6 o'clock, P. M. She had been under the care of another physician since morning. I understood from him that the head had reached the inferior strait about noon, but since then had not advanced any. She was quite hoarse from her cries; the pains were feeble, and returned at intervals of six or eight minutes. The head occupied the inferior strait, and presented an unusually large soft flaccid tumor, evidently from the effusion of blood under the scalp. There was no use of delay, and as the forceps afforded a better chance of a speedy and safe delivery than ergot, it was determined to use them. She was properly placed in bed, about a fluid drachm of chloroform poured on the sponge, and she directed to breathe of it.

The inhalation and delivery were precisely similar to that detailed in the first case, and need not be here repeated. There were no muscular efforts, no crying out; the pulse and respiration regular and equal, and the patient appearing as if in a quiet slumber. The child was still born, a result

generally to be predicted, I believe, when we meet with such a cephalic tumor, so large, and so entirely without tenseness. Her recovery was rapid and complete.

6. Mrs. K.—She had some severe pain a fortnight before her confinement, which, I felt, threatened premature delivery. The morning of the day on which she was confined, she sent for me on account of an attack of diarrhoea and pain. By noon both were arrested, and she lay entirely comfortable until 5, P. M., when some pain in the back came on, preceded by some flowing; the pains increased, and soon became regular labor pains. I was sent for at 8 1-2 o'clock in the evening. The pains returned regularly every five minutes; os uteri dilated to an inch in diameter. I left her to return at 1-4 before ten. Os uteri then nearly two inches in diameter; bag of waters well formed; presentation of child 1st position of the vertex. From 10 to 10 1-4 o'clock I counted the pains; there were six of them, lasting each from one to two minutes. I then commenced the administration of chloroform in moderate doses. She breathed it with the greatest avidity; held the sponge herself; said she scarcely felt her pains. But after inhaling it a few times she complained of nausea, and asked for something to vomit in; a vessel was handed her, and she vomited moderately. She soon after called for the chloroform again, and took the sponge herself. She would hold it first to one nostril and then to the other, snuffing it as eagerly as an old snuff-taker would a first rate pinch of snuff. At times she complained that I did not give her enough of it. After ten minutes had passed in this way, she seemed a little wild and hysterical; talked of her husband as being confined somewhere, and of her trust in me to let him out; she even seemed disposed to weep about it. I discontinued the chloroform for one or two pains, (which continued just as frequently and forcibly as before she had breathed of it at all,) when she really complained so much of my not giving it to her, that I again allowed it. It was during this time that I directed a cup of tea for her. I, myself, poured it from the cup into the saucer, while she raised herself on to her elbow and drank of it until the cup was emptied.

All this time I certainly supposed her to be partially sensible of her pains; but only partially so, for I could see plainly enough by her actions, that after a few inhalations, just as the pain was coming on, she did not suffer that sharpness of pain which she did when not under its influence; and she was herself continually saying how it relieved her pain, that she did not suffer from them as before.

The labor went on very rapidly. It really seemed that the dilatation

was more rapid than it would have been without the chloroform, although of this there must be doubt. At 10 1-2 o'clock there being full dilatation I ruptured the membranes. In five minutes more the head had got low down into the cavity of the pelvis, when I asked her to turn from her back on to her side. This she did immediately without any assistance.

She still continued in distress about her husband, fancying that he was about to desert her; said something about our destroying the child, and continued to make considerable outcry during the pains, although the chloroform was given her every pain. I had no doubt in my mind of her sensibility to all that was going on. Finally at 1-4 to 11, the child was born. It was her second child, was quite small, and according to her reckoning was one month premature.

There were but very moderate after-pains; no flooding. She did not sleep any that night; had a constant headache for which she kept her head bathed in spirits of camphor. The want of sleep nights was usual to her for some weeks before; the headache was not common.

The diarrhoea returned the next day, but was finally subdued in three or four days, and she soon after got well and hearty.

On careful enquiry the next day, I found that she recollected scarcely anything from the first moment of breathing the chloroform; neither of the nausea and vomiting, nor of taking the cup of tea, nor of her turning on her side, at my request, shortly before the birth of the child, nor of the delivery of the child itself. As already remarked, I did not at the time think her wholly insensible; she heard readily; answered, generally, correctly; and did at once what was desired of her; and besides, called repeatedly for more chloroform. She recollected every thing done and said from two or three minutes after the child was born. Of all cases I have seen, this appears to me to be the most curious and interesting. I feel no doubt of her having told me the truth, when she denied all recollection of the labor after commencing the use of chloroform.

7. Mrs. J.—In labor with her second child; presentation 1st position of the vertex. The pains accompanying the dilatation of the os uteri were very feeble and at long intervals, so that the dilatation occupied altogether some twenty-four hours. The membranes ruptured immediately on the completion of the dilatation, and three forcible pains completed the delivery. It was only during the last two pains that chloroform was administered. It produced the usual effect of insensibility to pain. She knew when the child was being born, but her mind seemed to be employed upon something else, for while the child was passing into the world, she exclaimed,

"oh, it is pretty, it is pretty." I asked her afterwards what she was dreaming of. She said she saw something, she did not know what, that was very beautiful, "it was yellow and green." The getting up was rapid.

8. Mrs. Y.—In labor with her second child. The former labor had been tedious and painful, especially the second stage. On visiting her, I found the os uteri dilated, but the head rather indisposed to enter the superior strait. The waters soon afterwards escaped, yet there was but slight advance of the head. The pains were rapid, there being only from three to five minutes interval between them, yet inefficient. The patient was impatient under them; throwing herself about the bed and indisposed to take hold of anything to hold on to, or to pull, during the pains, and would not "hold in her breath" and bear down. Three-fourths of an hour passed in this way, without advancing the labor. The head had fairly engaged in the superior strait, but lying more against the right ilia, than presenting in the centre of the strait. I put about half a teaspoonfull of chloroform on to the sponge and had her inhale it on the accession of a pain. The next pain she breathed of it still more freely, and instantaneously as it were, there was a change in her behavior. She took hold of the sheet I had had tied to the bed post, and pulled most powerfully (for she was a strong hearty woman,) whenever the pains came on. Slight hysterical symptoms were observable, such as a disposition to weep, and otherwise acting as if she felt distressed about something. She, three or four times, asked me how long I thought it would be before she would get through, and repeated the question only the last pain but one, before the child was born. Not over a minute after the child was born, and while it lay upon the bed crying, she suddenly started and asked quickly, "what is the matter, what is the matter?" raised her head and looking around added, "why I have been asleep, hav'nt I?" She supposed the crying which woke her, was by her little girl. She declared she did not know when the child was born; nor was she sensible of any pain after the second inhalation of the chloroform; nor has she any recollection of asking me when I thought she would get through. The time from the commencement of the administration of the chloroform until the birth of the child, was twenty minutes. During this time, whenever I noticed a pain coming on, or whenever she showed by her cries (for she cried out some nearly every pain) or actions any apparent increase of distress, I directed the nurse to hold the sponge to her nostrils for three or four respirations. The recovery was rapid and without any bad symptoms.

In this case, also, I did not suppose her so entirely insensible to pain as she afterwards declared herself to have been. The apparent suffering, although slight compared to what it had been; the free use she made of the voluntary muscles; and the question she so often asked me, certainly indicated, at least, partial sensibility to her situation. In some respects, it will be noticed that this resembles the sixth case.

This concludes the first division of the cases. There is a close resemblance in the effects of chloroform upon the system in the *first, second and fifth* cases. There were in these complete anaesthesia, unaccompanied with any mental aberration, and nearly entire abrogation of the contractile power of the voluntary muscles. The *third* closely resembles them, except in the slight delirium which accompanied it. The *fourth* case presents the anomaly of the tolerable free use of chloroform failing to produce any very sensible effect over the system for better or for worse. The second trial with it succeeded better, by lessening the natural expressions of pain, without stopping them, while it destroyed all recollection of any pain. The bystanders feel as though the patient were in pain, and duly sympathize with her, while she herself feels none.

The *sixth* case is rather anomalous. I can easily fancy that it would be far more difficult for those who were by, to believe that she was insensible to all that was said and done by herself, as well as by others, than it would be for those to whom the case is related. The *seventh* case shows the curious fact, noticed also by others, of pleasant sights, dreams, or emotions occupying the mind of the patient while under the influence of this medicine. In the *eighth* case, the labor was unequivocally hastened, I believe, by the inhalation of the chloroform. In the condition of the mind it shows some resemblance to the sixth case.

I now proceed to the narration of the cases of the second division; those in which a perfect knowledge of everything going on was not lost, or only momentarily so. There are seven cases in this class. Their consideration will not take much time, as we have but one relation in which to observe or study them, viz: *the possibility of exhibiting chloroform to a point short of causing insensibility, or in any way interfering with the full use of all her faculties, or with the full play of the voluntary muscles, and yet so benumbing the pain as to make it quite easily bearable.*

If this point can be established by experience, it would be, I believe, a great desideratum in midwifery, as far as the use of anæsthetic agents is concerned. In the *first* place, there would be no division of opinion as to its entire safety, when proper to use it at all; *secondly*, it would obviate an

objection constantly met with among the women; that is, their dislike to be put in a condition of unconsciousness during child-birth, even if it be perfectly safe; they want to know all that is going on at such times.

9. Mrs. P.—In labor with her second child. First position of the vertex. I administered the chloroform at her particular request. I commenced its inhalation before the full dilatation of the os uteri, on account of her suffering from the severity of the pains. It was given in small doses almost every pain for just three-fourths of an hour. She would tell us when she first felt the pain coming on, and call for the sponge; her husband who sat at the head of her bed with it, would immediately apply it to her nostrils, when five or six good inspirations, especially if the sponge had been recently wet, would bring her sufficiently under its influence to remove it, and let her work out the rest of the pain in some comfort. Twice she thinks she momentarily lost herself when breathing it. She said she felt very sensibly its benumbing effect over the pains; it seemed to take off their sharp edge, and make them quite bearable. Not a single unfavorable symptom followed its use.

10. Mrs. R.—This patient consented to breathe it only at the eleventh hour; that is, not until the child was about being born. She got enough under its influence not to complain of the last pain or two, but lay quite comfortable, using the voluntary muscles to their full extent.

11. Mrs. L.—In labor with her first child. When I arrived the head had nearly reached the inferior strait; the os uteri had a diameter of about three inches; the membranes entire; the pains were at long intervals for such an advance of the head, from eight to ten minutes intervening between them; they were, however, tolerably sharp. The patient wished to breathe the chloroform if it would ease her pain. The first time she inhaled with great caution; with the second pain, quite freely; when the next pain came on, I did not offer it to her until she called for it, upbraiding me for negligence. She insisted, afterwards, upon having it on the accession of each pain, and it was with some difficulty that I could persuade her, two or three times, to have a pain or two without breathing it. It was one and a half hours from the time she first commenced inhaling it, before the birth of the child. The pains continued at long intervals until the very last. She did not lose her consciousness for one moment, yet in every instance, expressed relief from the inhalations.

12. Mrs. W.—Second child. She inhaled it only for about fifteen minutes during the latter part of the second stage. She was sufficiently under its influence that the birth of the child caused very little pain, yet

was entirely conscious. I should think she was more under its influence at that moment, than were either of the three preceding cases at the corresponding time in their labors.

13. Mrs. B.—In labor with her first child. Her friends were unwilling that she should take chloroform, although willing herself. Its use was thereby postponed until the last moments of the labor. The head had reached the inferior strait, where it was delayed from the want of pain sufficiently expulsive; she could not bear down on account of a severe cutting pain such exertion gave her, in and through the central part of the abdomen, (in the fundus uteri, I supposed,) which was very distressing, and effectually prevented her from exerting herself. The head had lain in this position without gaining any, full three-fourths of an hour, the pains occurring once in five or six minutes, sharp and annoying. Her friends finally consented that she might try chloroform. The first inhalation "took away," as she expressed it, that pain in the bowels which had been so distressing; she bore down well, and after four or five pains the child was safely delivered. This is a case like the eighth, where the labor was decidedly advanced by the use of chloroform.

14. Mrs. P.—Third child. The labor was in every way natural. Chloroform was given during the last half hour, merely to relieve pain; and given in small and frequently repeated doses, so as not to cause a loss of sensibility. It was entirely effectual.

15. Mrs. J.—The first labor. I was called at 9 A. M., and found she had been in pain all night. Os uteri only half an inch in diameter. The pains recurring at short intervals until 11 o'clock, with very little progress. I bled her—took 18oz. The dilatation still proceeded slowly. The pains had become more sharp by six o'clock; os uteri dilated to two inches in diameter. I soon after commenced giving the chloroform, while she was sitting up, with the idea principally of relieving pain, and in the hopes of assisting in the dilatation of the os uteri, if the remedy had any such power, a point which my observations do not enable me to determine satisfactorily to my own mind. After inhaling it on the accession of each pain for nearly half an hour, she complained of being faint and asked for water; I attributed the faintness to the combined effects of fatigue, the bleeding, and the chloroform. The breathing of the latter was discontinued; not long afterwards she lay down again. The dilatation, I thought, had been more rapid than before, for the waters soon discharged, and the head began to press upon the perineum. The pains became more forcing, and I again gave the chloroform in tolerably free doses for two or three pains, when the child

was born, as in the other cases, without suffering while under the influence of the remedy, and without loss of consciousness.

This concludes my list of cases. On looking them over for untoward symptoms which the chloroform *may* have had an agency in producing, I find in the *second* case, nausea, some dizziness, and a sense of thoracic oppression; in the *sixth*, one turn of vomiting while under its influence, and headache after coming out from it; and in the *fifteenth* case, the faintness was probably, in part, due to the same cause.

In the *third*, *sixth*, *seventh* and *eighth* cases, there were slight hysterical symptoms, talking, confusion of mind and ideas; in the *third*, *sixth* and *eighth*, the hallucinations were unpleasant, while in the *sixth* they were apparently very agreeable.

The *eighth* and *thirteenth* cases were the only ones in which I was fully satisfied that the chloroform had a decided influence in shortening the duration of the labor.

In the *fourth*, *sixth* and *eighth* cases, there were such positive expressions of pain, with apparent partial consciousness, that only the repeated declarations of the women could well convince me that they actually felt no pain.

And here let me remark upon the great caution that ought to be exercised in the administration of chloroform in similar cases. Their actions and cries are so indicative of suffering, that we, the physician and assistants, have no doubt that they are partially sensible; and, perhaps, desirous of producing a decided effect, we cause them to inhale the chloroform in freer doses, and for a longer time; and what is the result? possibly, death. If the patient is of such a constitution that a moderate dose produces insensibility, we are satisfied, and do not urge it; but when with equal insensibility, there is an apparent consciousness of suffering, complicated with a semi-delirious condition of the mind, here it is that we might err, and without a proper knowledge of this important fact, and caution in the use of our remedy, we might do irreparable injury. Never, while in the practice of medicine, have I felt my responsibility greater than while reflecting upon these cases; and feeling how easy it might have been, to have done harm, if, urged by a desire for a decided effect and a brilliant result, (as the safe delivery of a patient without the appearance or expression of pain really appears to be) I had urged the chloroform until complete anæsthesia was produced.

I commenced the use of chloroform, decidedly influenced by the opinion of Prof. Simpson, that it was better and safer to give a full dose, and at once produce a decided effect, than to give it in smaller quantities, repeated as occasion might require; and although my cautiousness did not always

allow me to reach that point at once, I persevered, in the first few cases, in giving larger and larger doses at every pain, until I had produced that result.

With my present opinions and experience, I should, and have, of late, done differently. So far from desiring that a patient should lie in a state, either of entire unconsciousness, or of dreamy insensibility in the intervals of pain, I infinitely prefer that she should be entirely conscious; some how I feel much safer and less nervous about her; I then have no fears of a possible bad result.

I think that the results afforded by the second set of cases, fully demonstrate the proposition with which I commenced their narration, viz: the possibility of exhibiting chloroform to a point short of causing unconsciousness, or in anywise interfering with the full use of all her faculties, or the full play of the voluntary muscles; and yet so benumbing the pain as to make it quite easily to be borne. I would add that we can anticipate this result, not only in occasional cases, but I believe, also, in the large majority of cases.

I would be clearly understood, that in all these cases of the second division, there were expressions of pain or uneasiness with each contraction of the womb; some more and some less; the voluntary muscles were, in all, excited into full action, as is usual when chloroform has not been exhibited. I depend upon two facts to determine the relief they received; 1st, the contrast apparent to all between their suffering before breathing chloroform, and that while under its influence; 2d, their own declarations of decided relief from its use; and their positive assertions that if it be their destiny to have more children, they would be sure to have it again.

The *fifteenth* case was the least satisfactory, in this respect, of any of the second class; being the only one which did not call for it after having once breathed it, if we happened to be a little dilatory in giving it to them on the recurrence of a pain, or allowed the sponge to get emptied of it.

As to my manner of giving chloroform in obstetrical cases: I do not now speak of surgical or medical cases. I prefer administering it in small or moderate doses. My sponge will hold just one fluid drachm of the chloroform, when filled to saturation; this I call a full dose, and I can be in no danger of incautiously giving more. From thirty to forty drops, I call a moderate dose; from fifteen to twenty-five, a small one. From five or six to ten or twelve *free, deep* inspirations from the sponge, wet with a moderate dose, will generally bring a patient sufficiently under its influence to benumb pain, and even to cause momentary insensibility; and if the sponge should be wet at every pain, and the inspirations be likewise free, full anæsthesia cannot fail to be soon brought on. I generally make one wet-

ting of the sponge do for two or three pains. I prevent evaporation by having it loosely stitched to the centre of a piece of oiled silk, of about six inches square, which silk is loosely wrapped around the sponge when taken from the face; and covers lightly the nose, mouth and cheeks of the patient while she is inhaling the chloroform. It ought not at such times to be tightly held over the nose but loosely so as to allow air to enter from under its edges, sufficiently moderately, to dilute the chloroform.

I have a perfect repugnance to administering it by taking a pocket-handkerchief, or a large sponge, and, at random, pouring from one to three or four teaspoonfuls on it for the patient to breathe. I once saw a man indirectly destroyed by putting out morphine, for him, in powders without weighing it. What wonder in having a similar result from chloroform, from similar carelessness. Both are remedies of activity and power.

I have some ideas upon the value the different symptoms seen in the patient while under the influence of chloroform, ought to have upon our mind in judging of her true condition, and, of course, upon our use of the remedy; but as they are as yet imperfect from want of sufficient observation, I forbear to trouble the reader with them.

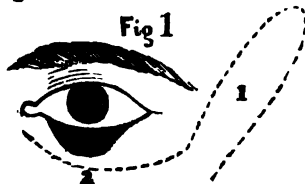
BUFFALO, Oct., 1848.

ART. II.—*Plastic Operations.* By DR. HAMILTON.—*Case 1. Ectropion of Lower Lid, and Restoration by Transplantation.*

March 18, 1848; operated upon Miss ———, of Lancaster, for an eversion of the left lower lid, produced by a burn, when an infant. Miss H. is now about eighteen years old. The eversion is to the extent of a little more than half an inch in its vertical diameter, and the whole breadth of the lid, in its transverse diameter.

About two years since a physician had operated by making a single longitudinal incision under the lid and then attempting to keep it open by various means; but this had resulted as all such attempts invariably do, in a final closure of the wound, and a return of the lid to the same condition in which it was before the operation.

Having brought the patient partially under the influence of chloroform, I operated in the following manner:



First an elliptical shaped flap (1) was raised from the temple, reaching above to the edge of the hair and below to about half an inch below the outer angle of the lid, leaving at the lower extremity a vinculum of about six lines in breadth, the widest part of the flap being about nine lines in breadth; thus making allowance for immediate shrinking and subsequent contraction during the process of cicatrization. Care was also taken to give sufficient thickness to the flap, and not to sharpen the upper end too much, from a neglect of which latter precaution I have sometimes lost the extreme end of the flap. An incision (2) was now made, commencing at the median or inner border of the lower extremity of the wound, and extending inward and upward to terminate at a point opposite the inner canthus, and about four lines below it; the middle of the incision having approached within about two lines of the lower lid; in its course upwards and inwards, the line of this incision made a slight convexity downwards. The knife was carried deep, and then by cutting upwards the lid was undermined and loosened.

Hemorrhage having nearly ceased, the flap was slid around and made to occupy the gaping wound made by incision (2), and here it was secured by a number of small sutures and by a compress and roller. The wound in the temple was now closed by sutures and straps.

The flap united in a few days without any loss of structure; and about three weeks after the first operation I cut off the vinculum, the wound from which soon closed. The wound in the temple closed very slowly.

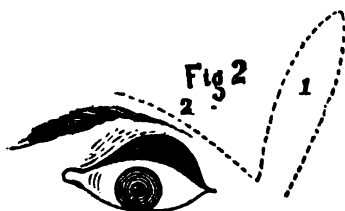
The result of the operation has been a perfect restoration of the lid to its natural position, and the consequent removal of the deformity.

Some months after this patient had returned home, she was attacked with a peritonitis, at least so I infer from the accounts which I have received, and soon died. Her death had no connection, near or remote with the operation.

Case 2. Ectropion of Upper Lid and Restoration by Transplantation.

March, 1848; I operated upon Miss ———, of Buffalo, aged 16, for an eversion of the upper lid, occasioned by a burn when a child. Two or three years before the cicatrix had been divided, and an attempt made to keep the lid down during the reunion of the wound, but with the same result as in the case just described; the eversion soon became as complete as ever.

I operated by making a flap from the temple (1) and laying it by torsion into the incision (2), and closing it down with fine sutures. The wound in the temple was also closed by sutures and adhesive plasters. The flap



united in a short time, except about three lines of its extremity, which sloughed either from undue pressure made upon it by a strap, or from its being too thin and therefore illy supplied with blood. The wound upon the temple healed slowly.

The result of the operation is, that the eversion and lifting of the lid is remedied so far as the flap was saved, but opposite the end of the flap where sloughing occurred, the eversion is reproduced.

The mode of operation adopted in the above cases is especially applicable where the eversion, as in both instances it was, is extreme; since by it alone can the restoration be completely effected. But care must be taken to have a sufficient vinculum, a thick flap and rounded at its end; all this to ensure its vitality. Care must be taken also that the flap should be considerably longer and wider than the loss to be supplied, lest by contraction it should become too small. The wound made to receive the flap ought to be deep, lest the new skin should pout, and it must be kept in place by fine stitches and *moderate pressure*.

I have lately seen a case in which the flap has gradually thickened and finally assumed the appearance of a tumor, of about the size of a hazlenut.

The wound in the temple will hereafter be made to unite more promptly and effectually by the use of the new adhesive plaster.

Where the eversion is less, the older method will still be preferred, as we have often demonstrated, and as the following case will show.

Case 3. Ectropion and Operation by Excision of a Triangular Piece. Mr. ———, of Ohio, with an eversion of lower lid to a moderate extent; the consequence of a burn in early life. In this case the operation of cutting through the cicatrix had been *twice* made, and with no better results than in each of the above cases.

I operated by cutting out a triangular piece in the centre of the tarsus, the base of the triangle corresponding to the edge of the tarsus; I *then* cut up the attachments below, and drew the base of the triangle together with a small suture.

The result is an almost complete restoration of the lid to its natural position.

ART. III.—*Principles and Practice of Surgery.* By the late GEORGE M'CLELLAN, M. D. Edited by his son, JOHN H. B. M'CLELLAN, M. D. Philadelphia; Grigg, Elliot & Co., No. 14, North Fourth St. 1848. (Continued from page 214.)

In the general chapter entitled "Effects of Injuries upon the Blood Vessels," no new theories are advanced, but the reader is left to infer that the author adopts completely the old doctrines of Hunter in relation to the pathology of inflammation, and that he regards inflammation as an "increased" action, and some of its forms as "healthy" actions.

"Redness, heat, swelling and pain," are the usual signs of inflammation, and are explained by Dr. M'Clellan in the usual manner, except that he sees no good reason why the change of the capillaries from colorless to red, should be ascribed to the admission of larger and red globules, since the whole circumstance is completely explicable by the fact that "the blackest fluid will look pale and even transparent when contained in very fine glass tubes." The change to red is owing to the larger amount of blood which the capillaries are now conveying, and not to the different size, or color of the globules.

Our author still continues to exhibit his partiality for the doctrines of Hunter, when speaking of the changes in the blood produced by inflammation, and contends for the heresy of *vitality*, with a confidence and boldness, which are, at this day, almost startling. He thus concludes:

"We may say, in support of the great Hunterian doctrine, therefore, that the presence of coagulating lymph in every drop of the circulating fluid confers upon the blood the powers of life, even if we do not agree with the latest microscopists in regarding the two orders of globules as organized substances."

In the treatment of the "inflammatory fever" sometimes from injuries, &c., M'Clellan declares for prompt and active blood-letting.

"Notwithstanding all we have said respecting the danger of indiscriminate blood-letting in cases of mere plethoric or tumultuous excitement, there can be no doubt of its safety or efficacy in decisive inflammations. The system undergoes a remarkable change under the influence of inflammation, in consequence of which blood-letting can be borne even by persons of the feeblest constitution."

"In severe inflammations, however, and especially of the internal or vital organs, repeated and large bleedings are frequently required. The first operation will, in these cases, sometimes raise the pulse instead of lowering it, and develop a great increase of the excitement. The oppression from the overloaded venous sinuses and auricles of the heart being removed by the first blood-letting, the action of the heart becomes more free and vigorous, and then an apparent increase of the disease follows.

This fact was not understood by the celebrated Louis when he asserted that blood-letting, during the first four days of a peripneumony, always proved injurious. He bled but once each day, and did not afterwards resort to the proper means of overcoming the subsequent reactions. In all such cases the patient should be watched incessantly; and the orifice be reopened from hour to hour, and a repetition of the blood-letting enforced as often as the pulse rises, until finally all efforts at reaction are overcome. In this way alone the most violent and dangerous inflammations of the internal organs can be subdued. Of course all the adjuvant or accessory means of treatment should at the same time be actively employed. The severe cases of peripneumonia, in this country, would all die or pass beyond redemption without such treatment."

Mercury is regarded as one of the most important adjuvants to bleeding, but it is a Samson to do evil, as well as to do good, and its pernicious effects are especially seen when used as a constitutional remedy in the earlier stages of acute diseases. Antimony, also, in minute and continued doses, is one of our most direct sedatives, and is not generally to be omitted as an antiphlogistic. Opium and morphine have also their appropriate places in certain inflammations.

Among the topical remedies no single one occupies so important a position as the nitrate of silver, which was used by the Dr. not only in all the various forms of inflammations in which practitioners have generally employed it, but also as an application over joints suffering under a deep seated inflammation, over the side in pleuritis, and in short, upon the skin, wherever, the subjacent tissues were inflamed.

Suppuration, ulceration and granulation, follow inflammation. Pus is regarded as an actual secretion, and incapable of softening other structures, but it is noticable that in certain situations, as about the anus, &c., cavities containing pus are often highly offensive when first opened; a circumstance which must be ascribed to the power of endosmosis possessed by the textures surrounding the cavity. Such abscesses cannot be opened too early.

Granulation becomes another text upon which the splendid investigations of Hunter are made to compare with the supposed novelties of modern speculators, and the "great investigator of life," is shown to have anticipated almost all that can be considered as probable in the new "cell doctrine." The refined extension of this new theory is thus severely rebuked, and it now needs only the satire of a Swift, or a Butler, to insure for it immortality.

"We must, then, according to the doctrine, have passed during the first six months of uterine existence through all the forms and assumed all the types of the whole of our Pre-Adamic ancestry, from the earliest monad up to the first man himself.

But enough of this folly. The cell-doctrine has already been carried too far for the sober sense of practical surgeons. Let it remain as a plaything for the fancy builders in science. Allow the microscopists to pursue their own researches, and work out their favorite results. "The tools to him who can handle them." We will follow the investigation of plain and tangible things, which we can see with our own eyes, and manage with the hands which God has given to us. It will add no strength to the certainty of our knowledge to decide whether a small particle of lymph be in the shape of a globule or a cyst before it becomes the medium of organization. The archetypes of Plato were just as important to the Baconian philosophy as such matters are to the progress of modern surgery. The chemists have found out that it is not necessary to ascertain the mathematical shapes of the integral molecules of matter, in order to study their laws of arrangement and combination. So we can go on with our pathological inquiries on the broad foundation laid down by Hunter, without stopping to question whether the three primitive monads were cubes, or tetrahedrons, or spheres."

The sections treating of cicatrization, hectic fever, and irritative fever, mortification, and erysipelas in its various forms, will amply repay for the reading, but we have been especially interested in the graphic description given of gangrenous erysipelas.

"During the harvest season of our northern latitudes, sporadic cases of this terrible malady sometimes occur among intemperate laborers who work from sunrise to sunset in the open air, and under an almost tropical sun. Stimulated by high daily wages, and the most pernicious kinds of alcoholic liquors, such men sometimes overtask their powers, and inflame their systems to the highest pitch of exasperation. The food which they consume at this season of the year is, moreover, especially unwholesome. It consists almost exclusively of badly cured salt meats, and heavy Indian corn bread, with the half decayed vegetables of the preceding year combined with a harsh drink of fermented apple-juice, called cider, pickles, and a plenty of fresh milk.* It naturally follows, that intemperance combined with such diet and fatiguing exposure to an ardent sun for fourteen

* "When I spoke of this subject in a surgical lecture at one of the medical colleges in this city, several years ago, it happened that a very intelligent old gentleman from the interior of New England, was in attendance in company with his son, then a student of medicine. The old gentleman stopped to converse with me after the lecture, and stated that he had personally witnessed three such cases of sudden mortification, and heard of four others in his region of the country within a period of twenty years. They all occurred in harvest and mowing time, in the irregular sort of laborers, who frolic about the country at most seasons, and let themselves out by the day at high wages in harvest time. He stated the difficulty of keeping any kind of fresh provisions over a very few hours in the hot summer days and nights, and want of all new vegetables in that time of the year, to be the great cause of the use of such unwholesome diet as I have described. In the northern states, no summer vegetable produce ripens so early as harvest time, and the laborers are compelled to feed on half decayed or sprouted potatoes, beets, cabbages, &c., of the preceding year. Of late, however, I understand that more attention has been paid in the north, to the cultivation of early spring vegetables and fruits, and that the use of wheat flour has become more common there among the laboring people. But in all probability, the great and glorious temperance movement of the day has done most towards checking the development of such cases as I have described."

hours every day in succession, must tend to the production of the most dangerous state of constitutional irritability. Then the slightest prick or contusion will always be followed by a widely diffused inflammation. But occasionally, an overwhelming and speedily fatal explosion of constitutional and local disturbance will supervene. A mower who has a short time before struck his foot against the sharp point of a twig, or a reaper who has merely scratched a finger with a stub of straw, will throw down his implement of labor, and scream with mortal agony. The injured member will suddenly tumefy, and present a glazy appearance with livid streaks, intermingled with green and yellow patches. Gangrenous vesicles will soon form, and putrescent odor begin to exhale. The pulse will be feeble and tremulous, the skin cold, and the respiration hurried and moaning. The face will be contracted, or hippocratic; the breath putrid, the eyes glairy, and the epigastric region distressed with a sense of horrible oppression. In from twelve to twenty-four hours the poor wretch will die, with the limb enormously swollen, tense, and crackling, with all the appearances of a malignant erysipelas, terminating in gangrene. No treatment has ever been known to check the progress of this disease. The tumefaction and lividity will, in the meantime, have extended up to the very trunk of the body so as apparently to have invaded the vitals. The laborious fishermen on our coast, especially those who are addicted to intemperance, and still more coarse and indigestible fare than the agricultural laborer of the same class, are said to be occasionally carried off by the same kind of explosive inflammation, from very slight wounds in extremely hot weather. Practitioners who have seen such cases, declare that the whole system becomes immediately putrescent, on the invasion of the erysipelatous-looking inflammation and distension; that the blood becomes dissolved, and that the muscles do not stiffen before burial. Indeed, they say that the muscles become softened almost into a rotten pulp, and all the soft parts become detached from each other, and from the bones beneath in the affected limb. The only treatment which ever appeared to make any impression upon the constitution, consisted in a prompt evacuation of the stomach by ipecacuanha or mustard emetics, dashing buckets of cold water over the whole naked body, wrapping up the limb in sheets wrung out of cold water, and administering large doses of ammonia, either in the form of the carbonate or aromatic spirits. But even such a course has only been seen to give a temporary check to the progress of the tumefaction and sinking; the local disease has only been protracted thereby so as to go on to a more thorough degree of sphacelation. It would seem in this class of cases, as if the influence of injurious causes had not only rendered the solids excessively irritable and weak, but that they had also destroyed the vitality of the blood, or at least so far modified it as to induce a decided proneness to putrefaction."

The succeeding chapters treat of furunculus, anthrax, abscesses, ulcers, burns, effects of cold, &c. Then follow wounds, tetanus, hydrophobia, and poisoned wounds.

"So greatly do the effects of wounds received in dissection depend upon the present state of the system, that many sensible men believe there is no such thing as a true septic poison in dead bodies." At the opening of

a course of dissections the student rarely suffers from a dissecting wound; but toward the close of the session the slightest puncture often produces alarming symptoms. Many of these cases evidently depend rather upon the condition of the system, than the character of the poison. Cases, however, do occur in which there can be no doubt of the reception of a peculiar and highly malignant poison; in regard to which two different forms are presented.

"By far the most dangerous and immediately fatal form, is that which results from the poison of subjects recently dead, and from whose blood the halitus or aura has not fully escaped. Some diseases are characterized by an odor as distinct from each other as occurs among different animals in health. The fomites of the clothing worn by patients who have labored under malignant fevers, is not more offensive or dangerous than the similar exhalation of a sickly and nauseous odor which so frequently offends us in recently exposed corpses. The post-mortem examination of all such cases should be postponed, not only until the offensive halitus has departed, but even until putrefaction has commenced. It is thought by those who have investigated this matter, that putrefaction destroys the peculiar and malignant poison developed in the bodies of patients who die of certain diseases. The results of putrefaction itself, however, sufficiently often prove injurious to those who are exposed to them, and these constitute the second form of septic poison affecting the system through the medium of absorption. It is not necessary even that wounds should occur in order to render the human system liable to the injurious effects of putrefactive odors. They may be absorbed through the skin and sound mucous membranes, especially by the medium of respiration. All the washings and changes of clothing which dissecting room pupils may resort to, will never render them fit for entrance into general society. The effluvia which they necessarily imbibe during their filthy though praiseworthy occupations, will be exhaled for days afterwards from their persons either in the form of expiration or transpiration. Very debilitating effects generally result in the constitutions of such individuals, and every precaution should always be taken by them to prevent the supervention of putrid fevers, or their associated forms of disease."

The treatment recommended by Dr. M'Lellan, is free suction applied to the wound, followed by nitrate of silver, sometimes preceding these measures by the application of a ligature.

"In the putrid diathesis resulting from absorption of morbid poisons, we may attempt to eliminate the putrescent matters by exciting all the secretions and exhalations, but it will rarely be proper to deplete in any shape. On the contrary, ammoniacal and violent stimuli will generally be required, along with opiates, and diluents, and nutritive broths. Great pains should always be taken to make timely and free incisions over all tumefied parts, and wherever we have reason to suspect the subjacent lodgment of matter."

We now come to that part of the subject of surgery upon which Dr. M'Clellan was always peculiarly interesting, viz. *Syphilitic poison*. In this chapter he criticizes freely the opinions of Ricord, while, at the same time,

he awards him credit for some valuable contributions in this department. Hunter and Carmichael are, however, his favorite masters, the latter of whom claims that there are as many distinct varieties of virus as there are distinct forms of venereal disease; and that there are four varieties of virus, one producing the "papular venereal disease;" or the "lichen syphiliticus," the second producing the "pustular syphilis," the third the "tubercular," and the fourth the "scaly;" all of which are named from the symptoms presented in the secondary forms, and which, if traced back to their primary forms, will be found to have been preceded by distinctive primary symptoms. The first of these several varieties is "gonorrhoea!" which, contrary to the doctrine of Ricord and others, he declares to be capable occasionally of producing a genuine chancre—to be followed often by constitutional symptoms, resulting in the papular eruption, and, in short, to be a true syphilitic disease.

Dr. M'Clellan rejects, also, the classification adopted by Ricord, and prefers to speak only of primary and secondary symptoms. In the arrangement of these divisions he adopts the unusual mode of treating of the secondary symptoms first.

The "papular" form, or what we should call the *secondary class*, is to be managed with antiphlogistics mainly, and without mercury.

The "pustular" form, or the "phlyzaciom" of some writers, accompanied usually with white aphthous ulcers in the fauces, is to be treated on nearly the same principles and without mercury, unless it be occasionally in the most chronic form.

The "tubercular" or "phagedenic," is a more formidable form than either of the preceding, and is accompanied with ulcers upon the skin, characterized by their having been preceded by a tubercle, healing from the centre while the circumference is extending, and in being covered often with thick conical scabs. The ulceration of the throat is also more rapid and alarming in its progress, destroying every structure in its course. With regard to the treatment, the author declares that he has never seen mercury cure or relieve these symptoms, but that, on the contrary, it never fails to exasperate them. Dr. Carmichael, and the British army surgeons, affirm that they have never seen nodes follow this form of syphilis except where mercury has been used, and Mr. Liston says, "this medicine may interrupt the progress of the disease, may remove the eruption and ulcers in the throat; but it, at the same time, transfers the disease to deep unyielding parts, to the bones and their coverings, and the fasciæ." The following excellent remarks we remember to have heard long since from Dr. M'Clellan himself.

"Since the publication of the earlier editions of Mr. Carmichael's work, a very great improvement has been made in the treatment of the primary symptoms of phagedena. Instead of the temporizing treatment recommended by him of blood-letting, fomentations, poultices, antimonials, purgatives and opiates, we now proceed immediately to destroy the whole morbid surface, by potential cauteria. A bridge of basilicon ointment is smeared around the edges, and over the surface of the neighboring skin, and then lint dipped in pure nitric acid is applied firmly over the sloughing or corroding surface. Emollient poultices afterwards speedily detach the sloughs and present a suppurating and granulating surface. In short, this efficient plan of treatment at once converts the diseased into a perfectly healthy ulcer, and effectually protects the constitution from all contamination in most cases. The secondary eruptions being accompanied with much febrile reaction, always require depletion at first, and generally, in the form of repeated blood-letting and purgatives. Antimonials and diluents afterwards come in as adjuvants, and finally, sarsaparilla with Dover's powder, or other sudorifics. The ulcers on the skin should be cauterized with caustic potass at their morbid edges and surfaces from time to time, and emollient poultices of slippery elm applied until the surface becomes healthy. Afterwards soap cerate, or Turner's cerate, spread on lint or linen, will speedily effect cicatrization."

Finally, the "scaly" form or the *lepra syphilitica* is that which Hunter regarded as the only genuine syphilis, the peculiar characteristics of which are sufficiently familiar to all; and it is here that mercury exhibits its greatest power, and that it becomes always proper and often indispensable.

Under this class the author arranges the "*condylomata*" of the English, or the "*tubercule muqueux*" of the French; the only form of secondary syphilis, which, since the time of Hunter, has been believed to be contagious. Ricord seems to think it may be contagious, while at the same time he has fully demonstrated that it is not "innoculable!" and Dr. M'Clellan assents to this doctrine. Mr. Liston, also, believes that a "secondary form of disease is occasionally communicated" from these tubercles; John Hunter demonstrated the same. Dr. M'Clellan, however, goes farther and thinks it by no means certain that other secondary sores than the mucous tubercle may not, under favorable circumstances, propagate the disease, since nearly all unhealthy secretions are found occasionally to propagate their kind. Perhaps after all, the profession will, sooner or later, come to the conclusion, that secondary syphilis is only not innoculable, or contagious (for we confess we have not sufficient metaphysical acumen to discover the distinction between these terms when applied to the propagation of syphilis) as a *general rule*, but that all of its forms under certain highly favorable conditions may be communicated by contact.

Exceptions are taken, not only to Ricord's classification of syphilis, but, also, to the general aphorism, the discovery of the truth of which is ascri-

bed to the "French Hunter." It is not true that *mercúry* is injurious in all the varieties of Ricord's tertiary syphilis; and that iodine is here a universal specific. Those forms of tertiary syphilis which assume the character of scrophula, doubtless demand iodine, but, even here, alterative doses of mercury will now and then more completely establish the cure. It is also certain that some tertiary ulcerations of the skin and mucous membrane are often benefitted by a judicious use of mercury.

We will not occupy more space by attempting an analysis of the primary symptoms and their treatment, yet this portion of the work is scarcely less interesting than the subjects just examined.

The book closes with the various forms of tumors, in the arrangement of which the author experiences the same difficulty which all who have attempted to teach, or write upon the subject, have experienced before him. Rejecting all precedents he becomes eclectic, and adopts so much of each as best suits his purpose. Under the head of non-malignant tumors, are arranged, encysted, cystoid and sarcomatous, of which latter there are the adipose sarcoma, or fatty, called by some, lipomatous, and of these the following varieties are named, the encysted, panniculated, the arborescent, the cholesteatoma and a peculiar congenital form described by Walther. The second class of sarcomatous tumors, viz, the fibro-cartilaginous tumors, or the enchondromata of Müller, constitute an order by themselves, as do also osseous tumors, under which last are arranged exostosis, spina ventosa, and simple osteo-sarcoma.

Under the head of malignant tumors are arranged first, malignant osteo-sarcoma, then the pseudo-plasmata, or malignant heterologous tumors, presented in the following forms:—first, scrofula; second, scirrhus, scirrhotic cancer or carcinoma; third, medullary cancer, medullary sarcoma, medullary fungus, encephaloid disease or soft cancer, fungoid tumor, fungus haematodes, most of which terms only express the varieties of one form. Finally melanosis, or black cancer completes the enumeration of malignant tumors; and after a full index comes "THE END;" if a book may be said to have an "end" which leaves off in the middle, and the other half of which was buried with its author. All that he might have said upon the great subject of operative surgery, and in which his practical tact, ingenuity, originality and skill always shone most conspicuously, is and must forever remain an almost complete loss. But sincerely as we regret for our own and humanity's sake this loss, we must be permitted to express our hope that no one will disturb the sacred repose of the revered M'Clellan by any vain attempts to resurrect and re-embody his thoughts. If it is indeed

possible from the scattered fragments treasured in the memories and note books of his pupils, or from the thin, fugitive notices of his opinions and operations to be found in the journals, to again gather up and bring together the dry, marrowless bones of his giant conceptions, and so to make every
"joint embrace his kindred joint,"

yet who can be found to breathe upon this dead and senseless mass of matter and inspire it again with a living soul? The son of Dr. M'Clellan in giving to the public these manuscript pages of his honored father, has erected to his memory a lasting and appropriate monument. It was the sole remaining act of filial duty, and it has been promptly and religiously performed; but, as he values the reputation of his deceased parent, we conjure him to forego his plan of attempting to "carry out the work to the extent originally designed." We would wish to remember Dr. M'Clellan, and have the world know him hereafter, as his living instructions, and these pages written by his own hand, and glowing with the warmth and spirit of life, represent him. For *any* man to attempt a counterfeit of Dr. M'Clellan must inevitably prove a failure, and, our word for it, the world will never recognize or entertain the bastard claims of such a book.

F. H. H.

ART. IV.—*Cases of Fever, with Remarks.* By the EDITOR.

In this article we purpose to give a few cases of fever, selected from those occurring in practice of which notes have been preserved, and in connection therewith to offer some remarks on the particular points of interest appertaining to their history. The questions involved in the history of the cases, and to which our remarks will have reference, offer scope for much larger discussion than would comport with the limits of a brief article. It is almost unnecessary to premise, that the few comments which time and space will permit us to indulge, will, by no means, embrace such a discussion of these points as their importance and interest claim. What we shall submit, will have, in addition to the little value which they may possess as the results of our own reflections, no other purpose than to serve as suggestives for the reflections of our readers. Our object, in short, is to give in connection with the account of each case, in a brief, discursive manner, some of the ideas which were suggested by the phenomena of the case while it was in progress, and which were of sufficient consequence in our own estimation, to be noted, at the time, in our case book.

Case 1.—D. G., aged about thirty; seaman; came under treatment on the 11th of August, 1847. He had on that day left his vessel, which had just arrived at port, having been ill, and confined to his berth, for a week previous. Had taken no remedies save a dose of salts, which had occasioned profuse purging. His symptoms, when first examined, were as follows:—Cephalalgia, occurring in paroxysms of sharp, lancinating pains; skin hot; pulse accelerated, well developed, but not hard. No delirium. Had been purging up to the time of my visit; some cough; respirations accelerated; tongue furred and dry; thirst urgent; no nausea nor vomiting; lassitude, and pains in loins and limbs.

I learned that his habits had been intemperate. One grain of opium was directed to be taken every six hours, which he continued to take for the space of twenty-four hours. The next day, 12th inst., the cephalalgia was relieved, and the diarrhoea arrested. From this date I will give succinctly, in anatomical order, a synopsis of the symptoms as presented throughout the disease. Tongue, most of the time, thinly coated, and dry. Sordes collected about the teeth during the latter part of his illness. No vomiting occurred. Diarrhoea did not recur, and the bowels were disposed to costiveness, until the end of the second week, when copious, bloody dejections took place, which occasioned extreme exhaustion. Tenderness over the abdomen was distinct, but not extreme.

A few rose spots (5 or 6) were discovered on the abdomen on the 5th day after my attendance commenced, which were visible for several days, and then disappeared. They were slightly elevated, redness disappearing on pressure. The pulse, most of the time, was but little accelerated. Occasionally febrile exacerbations occurred, but without regularity. The skin, most of the time, was moist, and, at times, perspiration was profuse.

Toward the end of the second week, mucus dislodged from the posterior nares, was bloody.

Deafness was not present. There was a disposition to somnolency, but there were manifest no indications of mental aberration. Intelligence appeared to be fully preserved through the whole course of the disease, up to a few hours before death. Prostration was considerable, but not extreme, until near the close of the disease, after hemorrhage from the bowels had occurred, when it became very considerable, and was accompanied by subsultus.

Meteorism, so as to occasion visible distension of the abdomen, was not present during the greater part of the disease, but in the latter part became a prominent symptom.

Slight cough existed at first, but, subsequently, this symptom ceased.

Perforation of the Intestine occurred on the 13th day after my attendance commenced, and death ensued two days afterward.

Examination of Abdomen 20 hours after Death.—Abdomen considerably distended, and unyielding upon pressure, offensive gas escaped on opening peritoneal cavity. Peritoneum presented punctiform redness, like ecchymoses, patches of lymph adherent to mesentery and intestines, and a small quantity of muddy serum, containing flocculi of lymph. Large and small intestines much distended with flatus. Divided the ileum at its connection with the cæcum, and inspected the mucus surface for the space of about two feet above the cæcum. For about a foot, the mucus tissue was uniformly thickened, and softened, and presented several ulcerations, one covering a space of the size of a half dollar. In this large ulcerated patch, a perforation existed of the size of a sixpenny-piece. *Peyer's glands could not be distinguished. It could not be demonstrated that the ulcerations were located in the glandular plates, and the entire membrane appeared to be equally diseased.* The Mesenteric glands were enlarged. Spleen enlarged and softened. The small intestine above the part diseased, contained a pretty consistent yellowish matter. The affected portion did not exhibit this matter, but appeared to be covered with mucus. Owing to the heat of the weather, and want of leisure, other organs were not examined. The record is defective in not showing the appearance of liver and stomach.

Remarks.—The first point of inquiry in this case relates to the diagnosis. Was it a case of Typhoid, i. e. common continued fever, or was it Bilious remittent fever? The symptoms of the first few days are not embraced in the history. Whether distinct remissions occurred before the patient came under my charge, I am unable to say. None occurred subsequently. The time of the year was that in which typhoid fever is not common, and in which remittents are frequent. The patient had been exposed to miasmatic influences, and periodic fevers, at that period, were rife among the lake mariners. Remissions after the first few days, are, by no means, uniformly present in cases of remittents, the fever lapsing into a continued form. On the other hand, the gastric symptoms, which are so frequently associated with remitting fever, were absent, and several of the symptoms which were present would affiliate the disease to the typhoid genus. The rose spots, (although very few in number) the bloody mucus detached from the Pharynx, and the occurrence of perforation from ulcer-

ation of the ileum *par excellence*, are among the characteristic phenomena of the latter. The pathological appearances of the ileum, however, differed from those ordinarily found in well marked cases of Typhoid. The disease was not limited to, nor specially located in the elliptical plates. It does not appear, from the notes, that the elliptical plates above the portion of ileum which was ulcerated, were hypertrophied and softened, as is usually the case. The mesenteric glands were enlarged, and the spleen enlarged and softened, which are among the anatomical characteristics of Typhoid. We are to consider in this inquiry that we have good authority for the statement that ulcerations of the ileum, and well marked disease of Peyer's glands, have been ascertained to have existed in undoubted cases of Remitting fever.

The condition of the intellect was such as rarely obtains in Typhoid fever proceeding to a fatal issue. There were no evidences of that mental aberration constituting what is commonly known as the typhoid delirium. While it is seldom the case that severe typhoid fever of fourteen days duration is wholly unattended by stupor or delirium, it is not uncommon for remittents to run their course, and the intellect remain unaffected.

On reviewing and comparing the facts belonging to the history of this case, we are free to confess our inability to decide, positively, as to its true nosological position, after the arrangement of fevers now generally adopted. Of this difficulty this case is by no means a rare illustration. In a locality like that of Buffalo, where miasmatic and typhoid fevers are now both common, the phenomena of both are not unfrequently intermingled, producing a hybrid form of fever, embracing more or less of the characters of either. We might adduce from our records other cases in demonstration of this fact. There are, in short, in this locality, (and we presume in other localities,) two febrile elements, so to speak—to wit, the periodic, and the typhoid, and the phenomena belonging to both elements may be united in variable proportions.

The inquiry, of late, has been raised, whether the fevers of certain sections where periodic fevers were formerly, and still are, to some extent, prevalent, have not, of late years, undergone a change. We are well assured from our own observations, that this has been the case in this section. The periodic element, year after year, has progressively diminished, and the typhoid element, in like proportion, has developed itself. A few years ago, the fevers of this place, and vicinity, were distinctly periodic, or, to employ the misnomer in common use, "bilious;" now the majority of cases, exclusive of intermittents, are typhoid in their character, or, more

properly, common continued. We believe in these views we express the current opinions of the profession of this city.

Case 2.—Sept 13, 1847; my attendance was requested upon J. S., aged about 25, a machinist by occupation, a young man of excellent habits, who has resided in this city for several years, and has always enjoyed vigorous health.

The history of the case up to the time of my attendance is, briefly, as follows: He was taken ill on the 2d inst. (ten days.) Previously to that date he had been ailing for several days, complaining chiefly of headache. On the 2d, he had a chill, and took to his bed. Since then, up to the time of my attendance, he was under the care of a homœopathic practitioner. His symptoms before I saw him, so far as I could ascertain respecting them, denoted continued fever from the first. Headache was the most prominent symptom for the first few days. His intellect appeared to be clear for the first few days, but he has since been constantly wandering. On one occasion he got out of bed, and went into the adjoining room, with the design of going out of doors. With this exception the delirium has been of a quiet, muttering character. He has had no diarrhoea. Bowels have been soluble. Has had no epistaxis. Had slight nausea and vomiting on one occasion.

The present symptoms are as follows: Mind apparently collected when the patient is roused; answers questions coherently, but relapses into a state of somnolency directly after being addressed. Lies on the back with lower jaw depressed. Tongue thickly coated, dry, and hard towards the tip. Teeth and lips incrustated with sordes. Some deafness. Skin cool. Pulse 100. No meteorism. Abdomen and chest exhibit a small dusky eruption, redness disappearing on pressure. Obscure tenderness, and gurgling on pressure over right iliac region. Makes no complaint. Bowels moved last evening. The medicines hitherto given produced no appreciable results; their nature not known. *The only diet allowed has been rice-water, until to-day, when a little arrow root has been given.*

Directed, for treatment, essence of beef, and a little brandy and water.

Sept. 18. Fever continues, but symptoms have manifestly improved. He has less muttering delirium, and less sordes. Tongue is moist. Pulse more developed, and less frequent. The pulse, for a day or two after the last record, was very feeble and intermitting. The bowels are soluble, moving once or twice daily, discharges being rather thin, and of a yellowish color. There has been no cough. The eruption has continued to be visible. The treatment has consisted of essence of beef, and milk porridge,

given hourly, in alternation. Brandy hourly. S. Quinæ gr. i, every four hours.

20th. Substituted yesterday maderia wine for the brandy, and allowed a little peach, and water-mellon. He has had, of late, until to-day, two exacerbations during the daytime. To day there has been more delirium, and the tongue is dry. No distension of abdomen; obscure tenderness continues. Three dejections since last evening.

Oct. 12. This patient is now convalescent. He became fairly so on, or about the 28th day after first taking to his bed. Convalescence was established by a gradual amelioration of symptoms. For several days preceding his convalescence, he sweat profusely at night. Delirium continued for several days after he could be pronounced convalescent. He imagined he had acquired great wealth—owned steamboats, horses, carriages, etc., and that he had large quantities of gold coin on hand. These delusions have now entirely disappeared, and he is rapidly regaining strength.

This patient has continued to enjoy good health up to the present time.

Remarks.—This case, the details of which, although rather sparingly recorded, are fresh in my recollection, illustrates some important points connected with the therapeutics of fever. As regards diagnosis, the case was doubtless one of continued fever, but whether it was properly to be considered typhus, or typhoid, may admit of discussion. We will not, however, stop to discuss that question, passing it by with the single remark, that to define the boundary lines between these two genera, or species, (whichever they may be considered) is certainly not an easier task than to determine, abstractedly, the dividing line which separates the animal from the vegetable creation.

The case may be considered, in the first place, as exemplifying the career of continued fever of a grave character without medicinal treatment. Quinine, in dose of gr. i, every four hours, during a portion of the disease, constituted the sole medicinal remedy employed after the case came under my care; and there are good grounds for believing, that, in so far as the case was treated by a homœopathist, the treatment was really homœopathic. This statement is quite necessary, inasmuch as a vast deal of active medication is practiced under the fraudulent guise of homœopathy. That Quinine exerts little or no power either to shorten, or modify the course of, continued fever, I have satisfied myself by repeated experimental observations. It was prescribed in this case because it was a remedy as nugatory as any entitled to be considered remedial, and simply, because I was unwilling that it should be said, provided the case terminated fatally, that

nothing was given in the form of medicine. This course was not pursued for the sake of experiment, but in accordance with the golden rule of therapeutics, *not to prescribe active medicinal agents, except with a view to some definite purpose which we have reason to believe may be safely fulfilled, and, if fulfilled, will place the patient in a state more favorable for recovery.* We beg leave to commend this maxim to the consideration of our readers. Guided by it, many cases of fever, of even a grave type, will call for very little medication.

In the second place, this case illustrates the importance of alimentation in fever. The patient for the first ten days had taken only rice-water for diet. I found him greatly prostrated, and rapidly sinking. Under the influence of stimulants, and nutriment, he speedily improved; and although his disease was protracted to the 28th day, he passed through it without accident, or any untoward symptoms. Patients in the state in which this young man was, rarely ask for food, or even drink. The mental condition is such that they are insensible to natural instincts, and their senses are dormant. The judgment of the physician and attendants must supply the place of both instinct and sensation. In other words, nutritious ingesta must be administered without reference to the desires, or even taste of the patient. That assimilation is capable of taking place in a limited degree, notwithstanding the febrile career, was apparent in this case, from the fact that the patient perceptibly gained strength while the fever was in progress. A few days after my attendance commenced, he was able to change his position in bed; to raise himself on his elbow to receive food and drinks, and to assist himself in passing his evacuations; and, in the mean time, he improved in other respects. We are reminded of the significant language of Dr. Graves on this topic: "If," says he, "I have had more success than some others in the treatment of fever, it is owing to my having followed the advice of a shrewd country practitioner, who advised me not to let my patients die of starvation!" (I give the quotation in substance, not verbatim.) That patients with fever have been permitted to die from inanition, seems to us but too probable. The diet suitable for fever cases is milk porridge, and the juice of meat; and by the latter is not meant the beef tea as usually prepared, which is, in fact, hot water flavored with animal *osmazome*, but the pure concentrated essence, obtained by boiling a sufficient quantity of meat in a vessel placed in boiling water, with the addition of very little, if any, water to the meat. The practitioner will find it necessary to attend to these details, if he wishes to secure for his patient the advantages of proper alimentation.

The continuance of delirium for some days after convalescence was distinctly pronounced, is an unusual circumstance. Its character, in this case, was that of exaltation in sentiments and ideas, and it may be perhaps supposed that it proceeded from the exhilarating influences of returning health. The patient, while it lasted, imagined himself possessed of the most ample means for temporal enjoyment. The delusion disappeared suddenly. The patient said that he thought the matter all over one morning, and came to the conclusion that his circumstances were the same as before his illness.

The mental condition in continued fever, during its progress, is not always fully appreciated by medical, and other attendants, when the patient does not give evidence of wandering by incoherent conversation. Patients frequently reply to questions coherently, and with apparent rationality, by a kind of habitual action of the mind, when no dependence is to be placed on the correctness of their replies. In the case just given, for example, while the bowels were daily open, I enquired, on one occasion, when he had the last movement, and his reply was that his bowels had not moved for two weeks! I had supposed that this patient was partially rational through the febrile career, but he informed me, after his recovery, that from the day he took to his bed, up to his convalescence, the period was almost an utter blank; he had an indistinct recollection of but a few striking events. He did not remember that I had visited him before his amendment occurred. In another case, of a medical friend, who passed through what appeared to be a very mild form of Typhoid fever, without exhibiting any indications of mental aberration, he stated, after his recovery, that he was able to recal but few events of his illness. A practical consideration connected with these facts is, to avoid placing too much reliance on the information derived by inquiries addressed to patients during the progress of Continued fever, even when they appear to have a rational command of their intellectual faculties.

Case 3.—D M., aged 20; mariner. Habits good. Entered the *Buffalo Hospital of the Sisters of Charity*, August 23d, 1848.

Precise period of illness, and the early history of the case, unknown. Had been ill several days on board vessel, from which he was transferred to hospital. Arrived at this port on the day of his entrance. Delirium manifest by incoherent conversation. Face presents a dingy color. Surface of body generally, exhibits congestion. Eyes suffused. Expression stolid, somewhat like one intoxicated. Skin bathed in profuse perspiration. Pulse very small, and irregular. Tongue covered with dark coating, dry and hard in centre. Sordes on teeth. Complains of nothing; says he

feels very well. Abdomen not distended, and no appreciable tenderness, nor gurgling. Dejections frequent, characters not ascertained. Is somnolent, and not easily roused. Treatment: Carb. Ammonizæ, grs. v. every two hours; two drachms of brandy every two hours. Lemonade.

24th. Perspiration diminished. Pulse more developed. Other symptoms the same. Treatment continued, with milk porridge for diet. Surface of abdomen mottled with faint red maculae, as if eruption was about to appear.

25th. Aspect improved. Pulse well developed, and but moderately accelerated. Skin warm and mellow, still congested. Mind more clear. Tongue moist. Treatment continued.

P. M. Tongue dry and hard. Pulse 100. Several dejections. Eruption not more developed. Skin moist. Continues somnolent, but is easily roused. Treatment continued.

26th. Copious, but faint eruption over abdomen and chest, extending, also, over upper and lower extremities. Gurgling in abdomen on pressure. Pulse 96. Skin cool and moist. No dejections. No distension of abdomen, nor tenderness on pressure.

P. M. No material alteration in symptoms. Treatment continued.

27th. Tongue moist. Two dejections during night. General aspect better. Eruption more distinct, extending even to feet and hands. *Redness does not disappear upon pressure; maculae not elevated, color somewhat livid.* Congested state of skin continues: presents an appearance as if the surface had been exposed to intense cold, consisting in a diffused, livid redness, which disappears momentarily on pressure. Skin dry and of natural temperature. Pulse 80, and feeble. No distension of abdomen. No evidences of delirium. No disposition to sleep during visit. Appears indifferent to persons and things around him. Treatment: Pulv. Camphoræ, grs. ii every two hours. Some deafness has existed throughout the disease.

28th. Aspect better. Tongue moist, and sides cleaning. Congested state of skin has greatly subsided. Eruption much faded. One dejection during night. Got up without assistance to relieve the bowels and bladder. Smiles when asked if he would relish a beefsteak. Pulse 80. Skin feels natural. Treatment continued with addition of essence of beef to diet. Sweat profusely last night. He now changes his position in bed without aid, and frequently lies upon his side. Treatment continued.

29th. Tongue less coated, moist. Sordes still collects about teeth. No dejection. Maculae have disappeared from abdomen; still visible, but

faint, upon extremities. Abdomen undistended. Arises without assistance to urinate. Pulse 72. Treatment continued.

30th. Countenance much improved. Appearance of tongue better. No dejection. Pulse 56. Treatment continued.

31st. Improving. Got up, of his own accord, and dressed, but felt compelled to lie down immediately. No dejection. Deafness continues. Ol Ricini 3ss.

Sept. 1st. One dejection from oil. Continues improving. Treatment: P. Camp. grs. ii every four hours.

Sept 2nd. Sitting up. Deafness continues. No medicine.

This patient continued to improve without any bad symptoms. No medicine was afterwards prescribed, and he was discharged well, on the 12th inst.

Remarks.—The point to which we would direct attention in the foregoing case, in connection with the general symptoms denoting gravity, is the course of treatment as respects medicine and diet. The case was one of well marked Typhus, and the symptoms, at the entrance of the patient, led to the apprehension that the disease might speedily run on to a fatal issue. The only therapeutical indication present, however, was to sustain the vital forces by stimulants conjoined with nutriment. The history shows that speedily, under this plan, the symptoms assumed a favorable character. Afterward the only treatment pursued consisted in the regular administration of camphor in small doses, brandy, and nutriment, with the exception of a single dose of castor oil after convalescence was declared. The reader will please notice how much the strength of the patient was preserved, being able to rise, without assistance, to relieve the bowels, &c., even before convalescence was distinctly pronounced, showing, as we think, that muscular strength may be actually, in some degree, regained, during the progress of fever, under the use of stimulant remedies and alimentation, those therapeutical measures being at the same time avoided, which would be likely to compromise the vital forces.

Case 4.—A German, aged about 25, was enlisted at the U. S. Recruiting Rendezvous on the 12th Nov., 1847. He appeared at that time perfectly well and robust. On the 13th and 14th inst. it was noticed that he appeared dull, and did not seem to be well. On the 15th, A. M., my attendance was requested. As he spoke no English, my communication with him was conducted through an interpreter, and was somewhat imperfect. The temperature of the skin was elevated; pulse accelerated, and neither full nor hard; hands tremulous. Bowels open. Complained of no pain, but said he felt fatigued. I was informed that he manifested delir-

ium during the night. The symptoms led me to suspect delirium tremens, but I could not ascertain that he had been indulging in stimulants, and his appearance had denoted that he was temperate in his habits. He had been in the country for four months. I prescribed as follows;—*R.* Prot. Chlor Hydrarg. grs. x, Pulv. Rhei grs. x. At evening I was unable to learn whether cathartic operation had been free, nor to obtain any information from the patient, the interpreter not being at hand. The prescription for this evening was, *P. Opii* gr. i, to be repeated in four hours if he did not sleep. Up to this time I had made no diagnosis, and was under the impression that the disease might be due to intemperance.

16th. Patient had been more quiet through the night, but delirious. He was sitting up, and dressed, but appearing greatly prostrated. Pulse very rapid. Appearance of tongue not morbid, but tremulous, and not readily protruded. Says he has no pain. *R.* *P. Doveri* grs. iv, every six hours. At evening, aspect worse. Respiration accelerated. Pulse very rapid. Skin has a dry, scorching heat. Constant wandering of mind; answers questions coherently, but apparently after taking a long time for deliberation. Mutters, and frequently attempts to get out of bed. Did get up on one occasion when unobserved, and went to the sink to relieve the bowels. No desire for food. Asks for nothing. Has taken, to-day, milk porridge by direction. Countenance has a sunken aspect, and an expression of vacancy, or astonishment. Coughs occasionally. No meteorism of abdomen, nor evidences of abdominal tenderness. A few small rose spots perceptible on the abdomen.

On this day the symptoms declared the disease to be typhus, resembling some of the cases of the so-called ship fever, which, at that time, prevailed among immigrants arriving at this place.

17th. Greater prostration. Pulse 120. Respiration labored and suspicious. Tongue, teeth, and lips loaded with sordes, which has accumulated since yesterday. Constant somnolency; mutters frequently in sleep.

Coughs occasionally, and expectoration is sanguinolent. Two or three dejections have occurred, which were liquid and yellow. No meteorism; firm pressure on abdomen causes groaning. Eruption indistinct. Surface of body has less heat. Has much difficulty in protruding the tongue. Asks for nothing. Countenance hippocratic. Treatment: *Liquor. Acet. Ammon.* $\mathfrak{z}$ ss. every two hours; ale hourly; milk porridge. At evening symptoms worse. Pulse as frequent, and more feeble. Skin cool. Respiration shorter and suspicious. Substituted brandy for the ale. Porridge and ammonia continued.

18. Died at 2, A. M. Got out of bed, and walked a few steps a few moments before his death. Autopsy not practicable.

Remarks. The history of this case illustrates the rapidly fatal progress of fever occurring in a subject, to all appearance, in perfect health the day before he was attacked with the disease, and proceeding to its fatal issue, not in consequence of the intensity of local complications, but purely from the intensity of the febrile affection. What are we to understand by the febrile affection; in other words, what are the pathological conditions which this expression involves? This inquiry leads us, at once, to the ætiology, and essential nature of continued fever, subjects which have been discussed for centuries, and are still open for discussion. We will only remark, that, to our own mind, the history of such cases, reasoning *par voie d'exclusion*, and by analogy, carries in a forcible manner the impression of a poisonous agency, which, affecting primarily the circulating fluid—the blood—occasions universal disorder, and destroys by its influences upon the sources of vital activity.

Case 5.—On the 5th Sept., 1848, my attendance was requested upon Mr. C., aged about 21, of excellent habits, and who had enjoyed good health. He had a few weeks before his illness made a journey westward, and had lately recovered from Pertussis. His duties, as a clerk, had been onerous, and he had had, for some weeks, an appearance of impaired health. For several days before the attack he had complained of feeling unwell. I saw him first on the evening of the 5th. He had had a slight chill the day previous. On the morning of the fifth, he attempted to go on with his duties, but was obliged to discontinue the attempt, and, at evening, he took to the bed. I found him with accelerated pulse; skin hot, but bathed in profuse perspiration; headache; thirst. The treatment consisted in the administration of a few grains of Dovers powder.

6th. I did not see him until noon. He had passed a very disturbed night, manifesting pretty constant delirium, wishing to get out of bed, imagining he was engaged at the store, etc. The perspiration subsided shortly after my visit the evening previous, and the skin had been, as it now was, hot and dry. Complained of severe cephalalgia. Pulse 120, and vigorous. Eyes presented an expression of wildness. Constant and great thirst. Tongue lightly coated. Respiration accompanied by frequent sighing. No alvine dejections had occurred since the 4th, on which day he had taken cathartic medicine. No vomiting, nor nausea. I directed ice cap to head, and Proto-Chlor. Hydrarg. gra. xii, to be followed by Seidlitz

powders, until free cathartic operations were procured. At evening, the medicine had operated freely, but the symptoms continued without much abatement. I did not perceive, on this day, any delirium, but it was occasionally manifested in my absence. Treatment: warm pediluvia, and ice to head continued.

7th. Night had been passed in constant wakefulness and jactitation, with much active delirium. Other symptoms unchanged. A venesection of ten ounces was practiced, which reduced, for a short time, in a sensible manner, the force and frequency of the pulse, and the heat of skin. At evening, however, the skin having regained its heat, and the pulse its volume and vigor, a second venesection, of from twelve to fourteen ounces, was practiced. The pulse and skin were sensibly affected by this bleeding, and indications of faintness occurred, notwithstanding the patient was recumbent. The prescription for the night was, Pulv. Doveri grs. iii, every four hours. Ice to head continued.

8th. Night had been less disturbed, but patient had obtained little or no sleep. Constant delirium, the mind laboring with an unceasing succession of insane ideas. Frequent efforts to get out of bed. The pulse, on this morning, were less frequent, being 100, and less vigorous. Less heat of skin. Makes no complaint, and says he feels pretty well. At noon the febrile movement became increased. On this day he had several liquid dejections. He manifested more delirium during the daytime than previously. He was almost unceasingly in motion, frequently attempting to get out of bed; talking incoherently, but generally occupied for an instant with a delirious idea, and the delusions constantly varying. Abdomen somewhat tympanitic. Pressure over the right iliac region caused pains, and gurgling. Treatment; S. morphiae gr. 1-8. Pulv. Camphorae gra. ii, every four hours.

9th. Had passed a very restless night. Delirium constant and active. For example, he imagined, at one time, that his watcher was a thief, and with this idea, he sprang from the bed, grasped him by the collar, and called for help so loudly as to awaken, and bring into the chamber, other members of the family who were sleeping in an adjoining apartment. Is constantly wandering to-day, but disposed to sleep. Sleeps rather heavily; frequently with eye-lids partially opened. Pulse from 110 to 120. Tongue inclined to be dry. Skin hot. Sighing respiration has ceased. Discharges from bowels have been frequent, which are liquid, and often escape into the bed without his consciousness, or notice. The condition of the bowels presenting the most urgent symptoms, two enemas of T. opii 3i, (each) were

administered, which restrained, for a time, the diarrhoea, and this constituted the medical treatment for the day. Dr. Treat visited, at evening, in consultation, and the following treatment was agreed upon:—S. Morphiae gr. 1-6, Pulv. Camphoræ grs ii, every four hours. Enemas of T. Opii ʒi, every six hours, if alvine discharges continue to be frequent.

10th. Passed as restless a night as heretofore, sleeping very seldom, and but a few moments at a time. Delirium constant, and active. On one occasion he had hysterical emotions—weeping long and loudly, under the idea that he had committed some heinous fault. A similar paroxysm occurred during the day. The bowels moved but twice, so that no enemas were administered. To-day, up to 4 P. M., he continued as actively delirious as through the night. His efforts to get out of bed rendered it necessary to watch him constantly. Morphiae gr. 1-6, and P. Camphor. grs ii, were given at irregular intervals, more frequently than during the night, and appeared, for a short time after each dose, to produce some quiet. Pulse 120. Eyes had a staring expression. There was not, nor had there been previously, increased sensibility to light, and noise. Pupils neither contracted nor dilated, and had free mobility. Tongue coated and dry. Sordes collects on teeth. Several dejections, but not so frequent and profuse as on the day previous. At 2 P. M., Drs. A. S. Sprague, and W. Treat visited in consultation. It was agreed to apply blister to nuchæ, and to exhibit S. Morphiae in doses of gr. ʒ, with P. Camphoræ grs iii. Shortly after taking the first dose he fell asleep, and slept profoundly for two and a half hours. At the expiration of that time he was roused with some difficulty. He then began to perspire, and sweat profusely for some time. He continued to sleep profoundly, but was without difficulty roused. Skin, at evening, became again hot and dry. Pulse 116. Involuntary dejections frequent and profuse. The directions for the night were to give no medicine unless he became again wakeful and delirious. If this be the case, and the dejections continue, give enema of T. opii ʒi, and, after waiting an hour, give S. Morphiae gr. 1-4, if the enema does not produce quiet. Give the Morphia without the enema, if dejections do not continue, and wakefulness with delirium recurs. Continue cold applications to head, as heretofore, with sponging of the body, which has heretofore been practiced several times daily. Milk porridge for diet.

11th. Passed a more quiet night. Delirium continues, but less active. Less restlessness. Two doses of S. Morphiae (gr. 1-4) were given during the night. Dejections not occurring frequently, no enemas were administered. On this day delirium more closely resembled that generally met

with in Typhoid fever. Disposed to somnolency. Pulse 116 to 120. Skin sometimes cool, and sometimes hot. Tongue moist, and thickly coated. Involuntary dejections frequent. Blister vesicated well. Treatment consisted of enemata of T. Opii. Essence of beef and milk porridge for diet.

12th. Drs. Sprague and Treat visited in consultation last evening, and it was agreed to give P. Opii gr. i, Proto. Chlor. Hydrarg. gra. ii, every two hours, and laudanum enemata *pro re nata*. Pulse last evening 120. He passed an exceedingly restless night, with constant delirium, and so continues to day. Continues to make efforts to get out of bed. Skin has been cool; no perspiration. Pulse 128, with less force. Has some trouble in deglutition, and articulates with difficulty. The opium has appeared to produce little or no effect. Involuntary dejections continue to be frequent and profuse. Enemata no longer retained. Possesses his strength so as to be able to raise himself quickly, and would get out of bed if not prevented. In the afternoon morphia was substituted for the opium.

On the evening of this day, Drs. S. and T. again visited in consultation. He was then quiet and sleeping. It was agreed to continue the Morphia in doses sufficient to produce quiet. He continued to sleep uninterruptedly for several hours, and, then, on being roused, appeared to have a slight convulsion. On rousing him fully, so that he would reply to questions, he said, in answer to my question how he felt, "first rate." He was kept under the influence of morphia through the night, but whenever the effects passed away, or he was roused, delirious activity returned. Death occurred at 7 A. M., 13th inst. A post mortem examination could not be obtained.

Remarks.—The first inquiry of interest and importance relates to the diagnosis. From the prominence of the cerebral symptoms, the question may arise, and did arise in the minds of the reporter, and those associated in consultation, whether the affection was not primitively and essentially encephalitis. The following considerations seem to establish the conclusion that it was a case of fever, of which the cerebral affection, whatever it may have been, was but a complication:—

Acute Encephalitis scarcely ever occurs in this climate, except as a consequence of injury, or, in some very rare instances, of the excessive abuse of alcoholic stimulants.

The development of the disease was like fever, the patient not having been well for several weeks, and several days being occupied in its forming stage.

The cerebral symptoms were gradually developed. There was never that excessive cephalalgia which usually attends acute encephalitis, and this

symptom was not more prominent than it frequently, or generally is, in cases of continued fever, and subsided after the second day. The delirium was gradually developed. It was manifested, it is true, the first night after the attack, but became, by no means, a prominent symptom, in the daytime, for the two first days. The character of the delirium was unlike that ordinarily occurring in connection with acute encephalitis; and, although more active than is common in continued fever, it presented the peculiar characters belonging to the delirium of fever. There was not, furious mania, but the delirium was characterised by constant activity of the mental faculties with a constant succession of delusions. The patient, at all times, exhibited coherency for the instant that his attention was directed by questions to a particular subject. His replies to questions were consistent. In short, the delirium was like that of typhus, except it was more active. That exaltation of the senses, which attends encephalitis, was not present, denoted by sensitiveness to light and sounds. Injection of the conjunctiva was not present. Vomiting, which very constantly attends encephalitis, was not present. Costiveness usually attends encephalitis, but in this case, profuse diarrhoea was one of the most prominent and troublesome features. Abdominal tenderness, especially over the lower portion of the ileum, and tympanites, which belong to the history of so large a proportion of the cases of continued fever, were present.

There were no evidences of the products of inflammation, i. e. symptoms of the second stage of encephalitis, in which oppression of the intellect is occasioned by the effusion of fibrin and serum beneath the arachnoid. On the contrary, the cerebral derangement indicated excitation up to the close of life, the pulse, too, preserving its frequency, etc.

There was not that tolerance of blood-letting which obtains in encephalitis more than in any other local inflammation. Moderate bleeding, in the recumbent posture, produced marked effects upon the circulation. The blood, which was received into a wash bowl, did not present any evidence of an excess of fibrin.

On a reviewal of the foregoing facts, and by instituting comparison with the diagnostic symptoms of Fever on the one hand, and Encephalitis on the other, the evidence, positive and negative, for the former, must be sufficiently apparent. The practical importance of the discrimination is obvious. Admitting that encephalic inflammation existed, it is not merely a matter of scientific interest to distinguish between a primitive local inflammation, accompanied, of course, by symptomatic fever, and an essential fever, embracing a local inflammation as a complication, but the treatment will be

materially affected by the distinction. An inflammation *per se*, demands a vigorous prosecution of those measures which are calculated to abate inflammatory action, but the same vigor of practice might be highly injudicious when the same inflammation occurs as a complication of fever, since, if the inflammatory action be subdued, the patient has still to pass through the febrile career, and the means adapted to the former may compromise the power requisite for the latter. The diagnosis is not in all instances easy, especially in children, and in adults if the history of the case be imperfectly known from its commencement. Cruveilhier frankly confesses that he has often erred in confounding fever with encephalitis.

Viewing, then, the foregoing case as one of fever, the question may arise, what was the pathological condition of the encephalon. This question, it is true, is to be answered in a certain sense speculatively, but we have always to decide speculatively, in the same sense, on the pathological conditions of internal organs while the patient lives. The ordinary delirium of fever, it is sufficiently ascertained, does not necessarily involve notable inflammation of the encephalic structures. Its active character in this instance, however, may lead to the supposition that inflammation existed. But acute inflammation sufficient to produce cerebral symptoms of so prominent a character, could hardly be expected to continue for the space of eight days, without giving rise to the usual products of inflammatory action, to wit, effusion of lymph and serum; and the presence of these should have produced a marked change in the cerebral and other symptoms. Taking this into consideration, in connection with the absence of those symptoms so generally associated with acute inflammation of the encephalic structures already mentioned, and the presumption is, that, had an autopsy been obtained, the evidences of inflammation would have been found to have consisted in more or less vascular injection, and opacity of the arachnoid. In view of the abdominal symptoms, also, we might confidently have expected to find more or less disease of the glands of Peyer.

As a case of fever, this is chiefly remarkable from its gravity, and the great preponderance and active character of the cerebral symptoms, in the latter particular contrasting strongly with the generality of cases occurring in this region.

BUFFALO, Oct., 1848.

ART. V.—*Rejoinder of Dr. Wm. H. Stokes, of Baltimore, to an editorial article in the American Journal of Insanity, containing Strictures upon the Mount Hope Institution.*

We give insertion to the letters of Dr. Stokes, recognising the right of a respectable member of the Profession to be heard through the columns of any public journal he may select, under such circumstances, provided the rules of proper courtesy are observed. In so doing (it is probably needless to state) our journal is only a vehicle of the communication, the editor being in nowise committed on behalf of the respondent. Of the merits of the controversy we are not, of course, competent to judge, but must presume that the strictures of which Dr. S. complains, if uncalled for, were made under misapprehensions.

EDITOR.

AUSTIN FLINT, M. D.,

BALTIMORE, OCT. 3. 1848.

Editor of Buffalo Medical Journal.

DEAR SIR:—I beg leave to send you the following short rejoinder to the strictures contained in the last number of the American Journal of Insanity, and written by Dr. Brigham, on the subject of Mount Hope Institution. If you think proper to give it an insertion in your excellent Journal, I shall feel obliged to you.

I have the honor to remain,

Very respectfully,

Your Ob't Servant,

WM. H. STOKES.

Dr. BRIGHAM,

Editor of the Journal of Insanity.

SIR:—I must be allowed to notice briefly the remarks contained in the last number of the Journal of Insanity, and written by you, in regard to Mount Hope Institution. I must be permitted to express my deep regret, that you should have inspected the institution under the influence of feelings, which prevented your forming an unbiassed and correct judgment of its arrangements and medical supervision. Otherwise, I am sure, you would not have given expression to statements so prejudicial to the establishment, and yet so wholly at variance with fact. You have not only expressed opinions well calculated to injure it without the shadow of evidence, but you have asserted, in regard to myself, as its Physician, what is perfectly destitute of foundation.

As regards our means of heating and ventilation, you have not the slightest ground for saying they are defective. The arrangements for warmth and ventilation are unsurpassed by any similar establishment in

this Country or in Europe. I say this advisedly, having myself visited most of any repute. The new wing and centre are heated by hot air furnaces in the basement. These supply the apartments and hall with a constant and regular influx of warm pure air, and in such abundance as to maintain the whole at a pleasant uniform temperature in the coldest weather in winter. The old wing and the Lodge are equally well heated by well-arranged and well protected stoves. In reference to our means of *ventilation*, it is invariably remarked by visitors, with surprise, that there should exist here such a perfect freedom from the closeness and impurity of air observed, almost without exception, in other establishments. Most of our sleeping apartments for single patients are considerably larger than those of other asylums. With us they average 9 by 14 feet, with a ceiling of 11 feet in height. In most other asylums they are but 9 by 10 feet, and 9 feet high. To afford the most ample circulation of air throughout the room, we have also over each room an unglazed transom sash, one foot four inches high. The air is consequently always pure and healthy.

You remark further, that we are defective in facilities for affording labor to patients. Perhaps we are unfortunate in not having a class of patients similar to that found in State Institutions for the Insane—a class who have all their lives been accustomed to hard labor, and who therefore manifest no great reluctance to engage in this kind of employment when attacked with mental derangement and confined in an asylum. You forget that this is a private establishment, and resorted to by patients of a wholly different class—patients who *may be amused* and perhaps induced to engage in *light occupation*, but who *will not work*. At no period of their lives have they been habituated to manual labor, and it would require more coercion than we are willing to subject our patients to, to induce them to labor now. But as it respects the possession of the most ample and abundant means for affording agreeable occupation and amusement to each and every patient, I do know, that this institution is behind none other in the country.

You have also ventured to pass an opinion condemnatory of the *medical supervision* of this institution. You assert that “he (Dr. Stokes) is, we understand, only hired to visit the institution daily and prescribe for such patients as the Sisters request.” This statement is perfectly gratuitous and destitute of the least foundation. I make my visits at the institution morning and evening, and more frequently if necessary. Every patient in the house is under my medical charge, and is seen and prescribed for by me. During the six years that I have presided over it in the capacity of

the Physician, there has been no exception to this regulation, and it is not true that I prescribe for such patients only as the Sisters request.

Contrary to your belief and expectation, I may be allowed to assure you, that I have experienced no difficulty whatever in establishing a uniform and good *system* of moral treatment, and that too, "without having entirely the selection, instruction and discharge of the attendants on the patients entirely in my own hands." The patients of Mount Hope are happy in possessing the priceless services of the Sisters of Charity. They constitute here the corps of attendants, and I presume you would hardly expect or desire the Physician to possess over them an appointing and expelling power. They are possessed of a degree of refinement and intelligence infinitely above the ordinary class of attendants, and impelled, as they are, to the performance of their duties by the highest and holiest motives that can influence human action, I declare to you, that I experience *no difficulty in establishing, with their co-operation, a uniform and good system of moral treatment.*

But, sir, if you would wish to form an accurate judgment of the adaptation of our arrangements to the exalted object of restoring the diseased mind, and of the sufficiency of the *medical supervision*, I refer you with pride to the large per-centage of recoveries recorded in the different reports for the last three years. Examined by this test, we do not fear comparison with any other institution. This large proportion of recoveries will amply testify to the completeness of our arrangements, and their perfect adaptation to the high purpose of restoring the disordered mind to its healthy balance. Whatever may be your opinion of the subject, formed from a hurried inspection of the building, experience has demonstrated, in the most satisfactory manner, that the institution is wanting in nothing that can contribute to the recovery, or promote the comfort of our patients.

Your Obedient Servant,

Wm. H. Stokes.

Physician to Mount Hope.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

To the Editor of the Boston Medical and Surgical Journal.

Treatment of Erysipelas.

DEAR SIR,—I send you, for insertion in your Journal, that portion of an address delivered before the Worcester County Medical Society, which gives an account of my treatment of a few cases of erysipelas.

In August, 1846, I was called to. E. C., a female aged 17, of sanguine temperament, florid complexion, auburn hair, had always been in perfect health. She was attacked with chills and fever, caused, as she supposed, by taking cold. She complained of severe cephalalgia. The mind sluggish, and a tendency to forget a question before she would be ready to answer. The tongue was dry and brown, with extreme heat of skin. I attributed much of the disturbance of the system to the fact that it was the first day of her menstrual period, and the discharge was stopped by her taking cold. I ordered an emetico-cathartic, composed of cal., pulv. sang. and ipecac., and followed it with diaphoretics and alteratives. There was a mitigation of all the fever symptoms, with the exception of the pain in the head, which continued with but little abatement. On the fourth day the erythematic inflammation made its appearance between the eyes, and extended over the nose and upon the forehead. It was first discovered soon after my visit in the morning, and I did not see it until evening.

I then applied nit. arg. around the inflamed surface, and slightly upon it; kept the face cool with spirits Mindereri. In the morning the inflammation had passed over the parts to which the caustic had been applied. I now painted it over with the alcoholic solution of iodine, but this did not check the progress of the disease; it advanced at a uniform rate. In the afternoon I called in my friend Dr. John Green, of Worcester. He considered the case a grave one, and advised a continuance of the iodine, and a free use of the saline cath., sufficient to produce several dejections during the twenty-four hours. This advice was followed strictly. Through the next day, the inflammation advanced as rapidly as before, the treatment apparently not equal in power to the disease.

From the circumstance that I had seen this form of erysipelas mostly among intemperate persons, in hospital practice, at Bellevue, N. Y., whose constitutions were impaired by their habits of indulgence and exposure, rendering them not only trying cases to the physician, but frequently unfortunate, I was anticipating anything but a favorable issue. I mention this as a reason why I had not much confidence in any plan of treatment, and was prepared to adopt any course which might seem to possess power sufficient to control the disease.

In reviewing the medication recommended, most of which I had used and seen used, I found that a majority of it had a tendency to diminish the temperature of the parts to which it was applied; and that I

had experienced the best results from that form which effected this object the most perfectly. Reasoning from these facts, I came to the conclusion that I would carry the refrigerating process to that extent, that it would control the inflammation, or give rise to some unpleasant symptoms that contra-indicated its continuance. In order that a thorough trial might be made of checking the inflammation by reducing the heat of the parts below their natural standard, I added salt to the ice, which is the mixture by which cream is frozen in the manufacture of ice-creams. This was put in a vessel and covered with a blanket. I then had a change of folded cloths, so that while one set was upon the patient, the other was upon the ice. The first application allayed the pain, and this relief continued until the parts began to grow warm again, which at first was not more than three or four minutes. It being necessary to apply the cloths in strips, it was a continual process of change. When the inflamed part was kept so cold as to feel almost like ice to the hand of the nurse, the patient would sleep quietly, and was free from pain; but if the attendant neglected to change the cloths in a given time, the pain would wake the patient.

From the commencement of this treatment, the inflammation not only ceased to progress, but began to subside, the general symptoms improving in the same ratio. After a few hours the cloths required changing less often; and as the disease yielded, she complained that the application made her chilly. The sensations of the patient (so far as evidence can be derived from four cases*), are a safe guide upon this point. This case went rapidly on to perfect restoration without any untoward circumstance to mar the happy result, or tend to create distrust of the truth of my deductions.

February 28th, 1847, was called to a young man, aged 28, very fleshy, of temperate habits, and good general health. Four days before, he was taken unwell, complained of headache, chills and general symptoms of fever. The pain in his head increased, until he was unable to work. This was on Saturday, the third day. His wife gave him a sweat, as she said; he perspired freely, and the head was relieved, but in the morning she discovered redness and swelling at the inner canthus of both eyes, and across the nose. It was upon the evening of this, the fourth day, that I was called to see him, for the first time, and found the inflammation had extended over both eyelids. I administered the same general remedies, and painted the inflamed surface over with iodine, made cooling applications, circumscribed the diseased portion with nit. argenti, keeping it upon the healthy skin. This caused vesication, but did not prevent the progress of the disease.

I now had recourse to the freezing mixture, as described in the other case. The general symptoms being so bad, I desired counsel, and Dr. Green was sent for. On his arrival, he advised a continuance of the treatment, as it had been so successful in the other case. The inflamed surface was excessively hard; it had, as Dr. Green remarked, a woody feel. This extreme refrigeration checked the spread of the inflammation, and the recovery was rapid. On the fourteenth day from the attack, after eating a

* One since, making five.

hearty dinner and taking considerable exercise, the cheek began to inflame, but it was controlled immediately by the application of ice.

May 20th, 1848, Saturday, was called to see a young miss, aged 11, in consultation. She had been under the care of Dr. Corlew from the Wednesday preceding, at which time the erythematic inflammation made its appearance, and first upon the nose between the eyes. The usual treatment had been pursued from Wednesday, until the time of my seeing her on Saturday about 1 o'clock, P. M. At this time the whole face, ears, and about two and a half inches of the scalp, were inflamed and much swollen, so that it was with great difficulty the eyelids could be separated sufficiently to exhibit the eyeball; yet it had not that indurated feel of the last case. The lower extremities were cold, the upper portion of the body very hot. The pulse varied from 130 to 140, and was quite feeble. The pain in her head was most intense, accompanied with raving delirium; she did not recognize her parents, or any one about her, but was constantly exclaiming that "they had split her head open," "they had cut her head off," "they had killed her," &c., indicating the suffering she was undergoing.

Just after I had prescribed for the patient, Dr. Green arrived; and after making an examination, he stated to the attending physician, "that he had seen three or four cases that I had treated successfully in this way, and he must say more so than he had anticipated, and he should advise its continuance. The face having blistered in several places, the salt could not be borne, and cloths cooled only by the ice were used. Before leaving, gave four or five grains Dover's powder. At 5 o'clock, saw her again. She was quiet, had slept some, was calm and rational; said she had some pain in her head, but before I was through with examining the extent of the inflammation the pain became so intense that she cried out from the suffering. This was relieved as soon as the cold cloths were applied again. The bowels were moved several times a day by the Rochelle salts; she took an infusion of *Asclepias tuberosa*, with fifteen or twenty drops of *spts. nit. dulc.* every three hours. After a few days the *rad. serp. virg.* was added to the infusion.

On the eighth day from my first visit, all symptoms of fever left her, and her recovery was rapid. A small abscess of a strumous character formed on the inferior maxillary bone, and another upon the forehead; the latter did not require opening.

In all these cases the rooms were kept cool, and there was a free circulation of air.

There are some conditions which appear so essential in order to accomplish the object sought by this plan of treatment, that I will mention them.

1st. The temperature of the inflamed parts, and for some distance around, should be kept much below the natural standard.

2nd. Care should be taken that no small portion is overlooked, so that the inflammation may be extending itself unperceived at that point.

3d. The diseased part should be kept *constantly* cold.

If this last precaution is not taken, and the parts become hot, the inflammation will extend rapidly, and it will require some hours to recover what has been lost.

This treatment can be considered no other than topical, and sustains

no different relation to the general or constitutional medication than any other local remedies; and I can perceive no objection to its being adopted, let the internal remedies be what they may. I should recommend the application of the alcoholic solution of iodine to the surface, as it serves to prevent vesication, and probably is of advantage beyond this, in changing the condition of the parts beneath the scarf skin, or cuticle, by reason of its acrid and alterative power.

In the last case where the disease had extended behind the ears, under the chin, and upon the neck, I found it difficult to apply cloths so as to reach all the parts and keep them constantly cold. These difficulties suggested the idea of suspending the head in a net, or what might be obtained in almost any family, and would answer as good a purpose, the article termed tidies. This mode of suspending the head would allow the pillows to be moved, and admit a piece of oil-cloth to conduct off the water; I then would place over the head of the patient a vessel containing ice and salt, the water from which would be let upon the head through a faucet, in such quantity as was desirable. The parts desired to be kept wet should be first covered with cloths.

In this way I think all of the conditions I mentioned could be complied with, and a favorable result secured, without the fatigue, anxiety, and, more than all, the liability of failure by reason of the unfaithfulness, or want of judgment, of attendants.

The temperature of the parts could be regulated by the quantity of water permitted to flow, or by the ice and salt, or by both together.

MILLBURY, Sept. 1st, 1848.

H. G. DAVIS.

[*Boston Med. and Surg. Journal.*

Dysentery.—To THE EDITOR. Sir,—I have recently used the following mixture in cases of *dysentery*, with more satisfaction, and with better success, than anything else I ever used:—℞. Mist. camph. f ʒv̄ij; acid nitric, f ʒj; tr. opii, f ʒij. M.

As soon as I am called, whether the patient has unnatural heat or not, if an adult, I commence with ʒss. of this mixture every three hours, and confine the patient to rice water for drink and nourishment. I sometimes add more laudanum, where the pain and tenesmus are severe. I diminish the frequency of the dose as the evacuations diminish. I frequently use no other remedy. This preparation is a modification of Hope's mixture.

No 100 Salem st., Boston, Sept. 1848.

EPHRAIM BUCK

[*Ibid.*

Efficacy of Small and Repeated Doses of Calomel. By Prof. TROSSEAU. —Prof. T. has been much in the habit, for some time past, of administering in *acute* diseases, as rheumatic fever, puerperal peritonitis, iritis, &c., minute doses of calomel, and with complete success. He takes one grain of c. and one drachm of sugar, and divides it into twenty-four powders, one of which is taken every hour. The same treatment is continued two, three, or more days, or until the gums are touched. This usually occurs in 48 hours, and sometimes even in 24 hours, or after the administration of only

one grain of calomel. It is rarely necessary to continue the powders during the third day.

The advantages of this method are—1. The system is brought under the influence of mercury as rapidly and as certainly as by any other mode of administering the drug. 2. The mercurial action never proceeds further than is intended, and the serious consequences of excessive salivation are entirely avoided.

In the treatment of puerperal peritonitis, M. Velpeau formerly used large doses of calomel and rubbed in mercurial ointment very freely, but unpleasant effects often followed this practice. But of late Prof. T. has adopted the plan of small and repeated doses, and he is convinced that he thus obtains all the good, and completely avoids the evil effects of the remedy.

In *chronic* diseases the same doses may be given at longer intervals; tenderness of the gums will not probably appear before the fifth or eighth day.

This method of giving calomel originated with Dr. Law of Dublin, who proposed it a few years since, but it did not at the time appear to receive much notice. The *modus operandi* of this method appears, according to Mialhé, to consist in the fact that calomel in the stomach undergoes a slow change before absorption, by coming in contact with an alkaline solution, as that of common salt, which thus partially changes it into a bi-chloride and metallic mercury. Hence as only small portions of calomel can be thus converted, it is immaterial, so far as absorption is concerned, whether one grain or one drachm is administered, as in either case the quantity of bi-chloride formed is the same. According to this view, the exhibition of common salt with the calomel ought to increase its activity in a marked degree, and perhaps the cases of so-called idiosyncrasy, where a small quantity of chloride has given rise to severe salivation, may find in this circumstance a rational explanation.—*Wood's Retrospect*.

The Eclectic Practitioners, or the so-called Practical Men.—There are medical men in high positions, greatly occupied with numerous patients, who from a want of study, of intelligence, or of time, from a natural indolence, or from being too old to master recent important improvements, affect a supreme disdain for everything that concerns doctrine or generalization, either physiological or philosophical. They call themselves PRACTICAL men, and speak ironically of *theorists—men of science* or *of the closet*, such who labor most for the advancement of medical science, and whose knowledge crushes and confounds them. These so-called practical men are those who have no doctrine and no general principles, who gather together ready-made formulæ and isolated cases, without any kind of scientific discernment. The only medicine they study is that contained in small books of prescriptions, published in 18mo. or 24mo., which they carry in their pocket, and know by heart. We have frequently had occasion to remark that a practical man, that is, a man who boasts of knowing nothing of scientific medicine, is a medical machine inferior intellectually to a master-mason, a locksmith, or a cabinet-maker, for these have principles and a sort of doctrine which they apply in their business. They were appreciated in like

manner by a learned individual whose authority no one could doubt, and who said,—“The true eclectic works without conviction, without principle, without idea. He is continually enlarging his circle, in order to enclose within it facts of the most contradictory nature—they sacrifice in a sort to every god, and create a kind of scientific pantheism, not less fatal to true science, than pantheism, properly so-called, is to true religion.”—*Professor Cruveilhier's Address to the Anatomical Society, 1845.*

DYSMENORRHOEA.—Dr. H. J. Holmes, of Mississippi, has recently written a letter to the editors of the New Orleans Medical and Surgical Journal, in which he states that the congestive, plethoric or inflammatory form of dysmenorrhœa is easily managed by a well-directed course of treatment. It is only in the irritable form that so much difficulty is encountered, and which has been generally considered incurable. The object of the letter is to throw some light upon the subject of the treatment of this disease, and propose a remedy which never fails to relieve pain, and if continued, will establish the *period*, and make it regular, free and healthy. The frequent trials I have made with it, says Dr. H., in all the forms of dysmenorrhœa, and particularly in the neuralgic or irritable, has convinced me that it acts specifically upon the uterus, in relieving pain and spasms, increasing the flow, dilating the canal, and permitting coagula or membranes to pass without the least inconvenience. The remedy has been tested fully in a case which I now have under treatment. The patient has irritable dysmenorrhœa, accompanied with convulsions, and dependant upon ulceration of the canal and os uteri; the pain has been entirely relieved, but the ulceration still remains, the cure of which I intend to effect by means of the caustic.

The prescription is as follows:

R. Gm. Camphor, ʒijss.

Ext. Belladonna,

Sulph. Quinine, aa ʒss.

M. ft. et divid. in pil. No. 80.

These pills are to be taken only at each period, and at the commencement of pain. Dose, two every hour until the pain ceases. In extreme cases, they may be given during the intervals of the periods, say one pill two or three times a day.

We have been in constant habit of using the above combination both in public and private practice for the last three years, and know it to be a valuable remedy in irritable dysmenorrhœa. We do not remember of seeing it in print before.—*N. Y. Journal of Med. & Collat. Sciences.*

UTERINE HEMORRHAGE.—Prof. Linton, one of the editors of the *St. Louis Medical Journal*, has, in the last December number of that journal, proposed a novel mode of treating this difficulty. It consists in the application of bandages to the legs, commencing at the foot and extending to the hip. He furnishes the particulars of a case thus treated. A lady of previous good health and robust constitution, soon after the delivery of the

placenta, was seized with a profuse and alarming hemorrhage; some delay occurred in obtaining ergot, during which time a firm clot from the vagina and uterus was cast off. The state of the patient now became extremely alarming, although the uterus was tolerably firmly contracted; "the general system was *already* in a state of prostration, from which I feared it would be difficult to arouse it;" the bandages were immediately resorted to, a decided improvement in the condition of the patient was soon evinced, "and in half an hour I was able to leave her without apprehending danger." His colleague Dr. McPheeters has also witnessed its beneficial effects in a case of severe hemorrhage which occurred during a miscarriage; he states that two or three minutes after the application of the bandage the state of the pulse exhibited a decided improvement. The patients in each instance expressed themselves decidedly relieved by their use.

Dr. L., in closing the report of his case, remarks, "it is not necessary to discuss the mode in which it acts, as every one will see that it is by supplying the general system with blood from the legs." Dr. McP. says, "it is not unreasonable to suppose that six or eight ounces of blood may in this way be supplied to the general system, and to that extent the drooping powers of life sustained, while other remedies are brought to bear." Certainly their application can do no harm, and in many cases of extreme exhaustion we have no doubt but that their use would be followed by the most pleasing effects. The readiness with which they may be obtained renders it well worthy of the notice of all, and particularly those who practice in remote sections of the country. May not the difficult and dangerous practice of transfusion be at least sometimes obviated by their use?—*Ibid.*

Citrate of Iron.—Our friend Edward Parish has shown us a *syrup of citrate of iron*, which appears to be a good preparation. He first prepares a moist proto-carbonate of iron, by mixing together solutions of sulphate of iron and carbonate of soda, precisely as directed for Vallet's ferruginous mass, and washing with sweetened water. This is then dissolved by means of a slight excess of citric acid in water, and evaporated to dryness. A greenish, deliquescent, freely soluble, uncrystallized salt results, the taste of which is ferruginous, but not very unpleasant. To make the syrup, one ounce (troy) of this salt is dissolved in five fluid ounces of simple syrup, which is easily effected, and forms a dark greenish-brown liquid. The dose is from thirty drops to a teaspoonful. The syrup of citrate of iron of Beral is a saccharine solution of the citrates of ammonia and sesquioxide of iron.—*Journal of Pharmacy.*

EDITORIAL DEPARTMENT.

BIBLIOGRAPHICAL NOTICES.

A Practical Treatise on the Causes, Symptoms, and Treatment, of Spermatorrhœa. By M. LALLEMAND; formerly Professor of Clin. Surgery at the University of Montpellier, etc. Translated and edited by Henry J. McDougal, F. R. S., of England, etc. Philadelphia. Lea & Blanchard. 8vo. pp. 320: 1848.

If called upon to cite a book exhibiting, pre-eminently, the errors and evils of specialties, we know not that a better illustration could be found than is afforded by the above work. The author begins by submitting the details of five fatal cases, in each of which spermatorrhœa had either been ascertained, or suspected to have existed at a period more or less remote from the patient's death, and in which more or less disease of the genito-urinary apparatus was discovered at the autopsies. But in each case disease of other organs existed sufficient to account for death, and the most prominent of the symptoms. That the latter affections originated consecutive to, and as consequences, of those appertaining to the genito-urinary apparatus, is a conclusion based on the merest hypothesis.

The same criticism will apply to a majority of the numerous cases which are contained in the work. The author assumes that spermatorrhœa, in whatever pathological connections it may obtain, is the essential primitive disease, as a matter of course, and, he appears sometimes to decide upon the presence of spermatorrhœa, inferentially, from the presence of phenomena which he has, in some cases, found associated with that symptom. The book, in short, shows that the author's mind is so imbued with the idea that the particular malady of which he treats is the *fons et origo* of a great proportion of the ills that "flesh is heir to," that it does not seem to occur to him to suspect that in some instances it may be merely a concurrent symptom, an epi- or anti-phenomenon, or an effect of the disorders which he attributes to it. In this he exemplifies, as already remarked, the dangers, and the evils of investigations limited, too exclusively, to special diseases.

The pathological effects of the disordered action, and of the voluntary abuse of the generative functions, constitute an important subject for medical

researches. That it is a subject involving, in a certain sense, indelicate and disgusting details, does not make it less deserving attention in a scientific point of view, in as much as there is reason to believe that physical and moral evils of no small magnitude may be traced to this source, and might perhaps be averted, in some measure, were they better understood. The subject, in our opinion, has received too little consideration hitherto. Too little pains have been taken to ascertain facts; and there has been, not only too little attention to the acquisition of farther knowledge, but a degree of oversight and silence, as regards what is known, which is almost culpable. Our patients, and the public, have not derived that benefit from what information medicine already possesses on the subject, which they have a right to claim of the profession. Physicians have yielded too much to the repulsiveness of the subject. A portion, however, err in the opposite extreme. Some, like M. Lallemand, attach to this, as the source of physical and moral evils, by far too much importance. Not a little mischief sometimes, arises from this error, from its influence upon minds already affected with hypochondriasis. Insanity, we believe to be frequently produced, not so much by the abuse, or pathological condition of the functions referred to, as by the melancholy conviction that irreparable injury has been inflicted upon the intellect and constitution, and the despondency and sense of degradation which grow out of this conviction. The harpies whose infamous business is to prey upon the credulity and fears of all who come within their grasp, have discovered this method of securing victims, and not a few instances have come within our knowledge in which sensitive persons have been tortured so long as their fears and credulity could be turned to profitable account.

But, returning from this digression to the work which it is our present business to notice, owing to the defects of which we have spoken, it possesses, pathologically, in our estimation, but little value, and is not calculated to shed much light on the morbid relations of the special disorder of which it treats. Therapeutically, it offers little that is new, except the surgical remedy which, we believe, originated with M. Lallemand, to wit, cauterisation of the prostatic portion of the urethra. It is now several years since this measure was proposed by M. Lallemand, and it might reasonably be supposed that the collective experience of surgeons should, by this time, have determined its merits with some definiteness. So far as we know, the results of its application in the hands of others, have been, for the most part, negative. We are not surprised at this, for the measure has always appeared to us a mere novelty, which, like other novelties of the same

sort, would be short lived. Whatever benefit may appear, in some instances, to be derived from it, may probably be explained by the moral and physical impression that such an operation is calculated to produce, irrespective of any appropriateness based upon rational, pathological grounds. We confess we have never made trial of it. Entertaining the views just expressed, we have preferred to await the results of the experience of others, before resorting to it in our own practice; and the consequence of this delay will probably be, that we shall, by and by, be hardly justified in resorting to it, should we happen to be disposed so to do.

In conclusion, we may remark, that we are unable to perceive that the work is calculated to do good except in so far as it may serve to direct the attention of the profession to an important and neglected subject, and, possibly, by its defects and errors, creating investigations which may lead to more useful results.

New Treatise on Venereal Diseases.—A volume has lately made its appearance in New York, entitled "*Nature and Treatment of Venereal Diseases*," by an M. D., which for size and impudence will not soon be beaten. It has not yet appeared in our book-stores, and it probably intends to avoid the reviewer's notice, but it is circulated by a travelling agent whose business it is to impose upon such as do not recognize the cheat, and to receive, with well practised composure, the rebukes of those who understand the book and its author.

The work is a quarto of nearly 400 pages, and on excellent paper, illustrated with a large number of most beautifully executed, and finely colored drawings. But, to a very great extent, the plates are exact copies of a work published four or five years since in Paris, by M. Ricord, and entitled "*Clinique Iconographique de l'Hopital des Veneriens*," and the text is but a correct translation of his cases as recorded on the parallel pages of the work. These pictures and their corresponding descriptions being thus faithfully copied into this book of Dr——, without the slightest acknowledgement. The reader is therefore left to suppose that they are cases which have come under the care of Dr.——

Having ascertained thus much of the merits of the book, we were unwilling to examine farther, thinking that we should prefer the originals.

If we are not wrong in our divination, this Dr. was not long since a Dentist; and is now a licentiate from the county society of the city of New York, and is especially known in that city as the unblushing quack who publishes daily in the advertising sheets of certain city penny papers more won-

derful cures and capital operations than are made by all the other doctors in the city of New York in a month. One need scarcely to have studied "Lichtenberg's Physiognomy of Cues," to have discovered the author's character, in the first pages of the book; and now that we have given the "cue," we trust none of our readers will be taken in. *Cave a signatis!*

F. H. H.

The Lungs; their Uses, and the Prevention of their Diseases; with Practical Remarks on the Use of Remedies by Inhalation. By JAMES STEWART, M. D.; Fellow of the College of Physicians and Surgeons. Author of a practical treatise on the diseases of children, etc. New York. W. H. Graham, Tribune Buildings. 1847: 18mo. pp. 139.

We cannot do better justice to this little book than by adopting the language of a friend whose opinion is worth much more than ours, and whose name (if we felt at liberty to give it in connection with a quotation from a private letter) would carry with it great weight. He says:—"I would call your attention to the merits of this little *brochure*, which, if I mistake not, you will find possessed of no common merit. It is really a philosophical and valuable little treatise, full of useful hints and suggestions, and worthy the particular attention of both laymen and doctors." We will only add, that if the reader of the book should not concur in the encomiums of our friend, he will have little to regret as respects loss of time or money, as its cost is a trifle, and it can be perused in an hour.

Editorial Changes.—Several changes in the medical editorial corps of this country have lately occurred. Prof. C. A. Lee has resigned connection with the New York Journal of Med. and Collat. Sciences, and is succeeded by Dr. Purple, who has heretofore assisted Dr. L. in his editorial labors. Of the distinguished ability of our friend, the late editor, it would be supererogatory to speak. We shall not be accused of being actuated by the prepossessions of friendship when we say, that few of those who are prominent as contributors to medical literature, possess talents and acquirements so peculiarly and eminently fitted for editorial success. During the five years of his dynasty, the New York Journal, (the management of which he reluctantly consented to assume, chiefly from respect to the memory of its founder, the lamented Forsy,) has arrived at a degree of success in which the views of publishers, friends, and the profession at large, are satisfied. But, like others who have been induced to assume a similar trust in addition to other severe duties, he found that "it brought with it

more of care and responsibility than he anticipated;" and, hence, like others also, in obedience to the dictates of self-preservation, he now "hands over the work, and the hard earned results of his experience to his successor." While we regret that the periodical medical literature of our country is to lose his valuable services, it is a subject of congratulation that his time and talents may now be devoted to labors, which, if not more useful, will be more satisfactory to himself, and add to his reputation monuments more enduring than the most successful efforts of the journalist. With regard to the Journal in the hands of its present editor, in the language of Dr. L. we would "express the hope that it may long continue to flourish, and contribute in a good degree in advancing the interests of science and humanity."

Our New York City contemporary, the *Annalist*, has, also, recently passed into new editorial hands, owing to a change of proprietors. The farewell address of its late editor, Dr. Wm. C. Roberts, came upon us quite unexpectedly, and, if we may judge from our own sentiments, we are sure has been perused by the readers of the Journal with not less regret, than surprise. In making this remark, we shall not be understood as desiring to intimate that the Journal will not be ably conducted hereafter. It is no imputation upon the merits of a new acquaintance that we part with an old friend with great reluctance. Without being able to claim the honor of a personal acquaintance with Dr. R., we have seemed to form with him, through the medium of our exchange, and many editorial courtesies, a friendly relation, which, on our part, we are loath to have sundered. His editorial writings have a fervor and sincerity which secure a warmer approbation than that which flows from the intellect alone. While their good sense commends them to the judgment, their heartiness wins upon the hearts of his readers. Dr. R. is succeeded by Dr. N. S. Davis, late of Binghamton, N. Y.

Another editorial change is the union of the two medical Journals published at St. Louis, Mo., the editors of each Journal being retained, making an aggregate of four. It is highly creditable to the editors of each of the Journals now merged, that while occupying rival positions as journalists, nothing ever transpired to mar their harmony and mutual good will. The editors of the two journals were, and still are connected with rival medical schools. With regard to this, they say in their announcement, that they cannot see in this circumstance "the slightest reason why they may not harmonize in the cause of science and humanity, to the promotion and advancement of which alone the journal will be devoted." Such being

the spirit of the combination, with the guaranty afforded by the past, excellent results may be safely predicted.

Curiosities of Medical Literature.—Medical literature, bibliographical and periodical, occasionally offers some curious specimens. The idea occurred to us, some time ago, of collecting some choice *morceaux* under the title which we have prefixed to this article; but, through inadvertency it has been suffered to lie dormant. The thought has been revived by perusing a communication contained in our respected contemporary, the Boston Medical and Surgical Journal, for Oct. 18th, 1848. The burthen of the communication is an account of a case of supposed vesical calculus, in which the operation of lithotomy demonstrated an error of diagnosis, a mistake which, we believe, some excellent surgeons have been known to fall into, without any cause for imputation of unskilfulness, and, certainly, without furnishing an occasion for an insinuation against surgery in general, which appears to be the object of the author of the communication referred to. But the *curiosities* in the communication are contained in the following paragraph:—"If I may be permitted to digress, this, and several other cases, have somewhat shaken my credence in the powers of auscultation by practitioners *generally*. A dearly esteemed friend of mine recently died. His disease was a softening of the substance of the brain *extending* to suppuration, which his stethoscopic examiners (eminent men) attributed to, and treated, for seven years, as a *diseased liver*! A *post mortem* examination demonstrated that this organ, with the abdominal and thoracic viscera, were in a perfect state. * * * Two years' zealous application to the study of the use of the stethoscope and auscultation, with a good "ear" for music, too, enabled me to distinguish for a "burring" sound in the left lung (the side upon which I had my ear) the rolling of a fire engine down the street."

The communication from which the above remarkable paragraph is quoted, has the signature of A. C. Castle, M. D., Surgeon Dentist, New York. We give the name, so that the important information enunciated in the quotation may have the full benefit of it. Dr. Castle has not much confidence in the "powers of auscultation by practitioners *generally*," because an esteemed friend died of softening of brain (*extending* to suppuration!) which had been treated as a diseased liver!! It is to be regretted that the learned doctor did not amplify upon the subject, and inform us what particular relations exist between the "power of auscultation," and softening of the brain, or diseased liver. It strikes our poor apprehension

that it would have been somewhat more apposite if the Doctor had quoted a case in which an error of diagnosis relating to pulmonary or cardiac disease had been committed. We are also (in our stupidity) at a loss to perceive the necessity of a digression concerning the "power of auscultation" in a case of supposed calculus of the bladder. But the confession contained in the last sentence is the most curiously interesting. The Doctor, it seems, applied himself zealously for two years to the study of the stethoscope and auscultation, with a good ear to boot, and was only able to distinguish the sound of a fire engine rolling down the street as a "burring" which, he had at first referred to the chest! Where in the whole range of philology did the term "burring" come from, as applied to an auscultatory sign! The reader will, assuredly, not wonder that the Doctor has but little confidence in the "powers of auscultation!" The confession shows that a "good ear for music" does not alone suffice for a good auscultator, but that some brains in addition are required. It must be admitted that the pen is a better instrument for revealing cerebral softening than the stethoscope.

Amputation at the Wrist-Joint, the Patient being Under the Influence of Chloroform. By BELA COLEGROVE, M. D., of Sardinia, Erie Co.

We introduce here, the following letter, which was received after the original contributions for this number were in print. EDITOR.

To the Editor of the Buffalo Medical Journal:

I accompanied my father to Boston in this county, Oct. 21, for the purpose of witnessing the removal of a mutilated hand. The patient, aged 20, was of muscular frame and vigorous constitution. Late in the afternoon of the previous day, while attempting to adjust the machinery of a saw-mill, his left hand coming in contact with the saw, was nearly divided at a single stroke. Upon examination, the meta-carpal bones were found to be completely cut through, and the soft parts of the hand extensively lacerated. The necessity of an operation becoming at once evident, a few drops of chloroform were applied to a sponge, and directed to be inhaled. A few inspirations sufficed to induce partial insensibility, and the knife was entered a little below the scaphoides, and carried steadily toward the point of connection between the radius and carpus. By a similar movement from the opposite side, the removal having been effected, the arteries were as usual secured, and the flaps handsomely adjusted. During the operation, the patient manifested little uneasiness, having only a vague and suppressed sense of suffering, which was shown by a low moaning. The influence of the anæsthetic agent, was conspicuously and happily exemplified. No unto-

ward effect followed its administration, and it was reasonable to expect no accident to the stump. From an observation of its effects in numerous instances, it seems impossible to apprehend any serious casualty, when proper caution is exercised. It is believed that in almost every instance of fatal or unhappy issue, the indispensable condition to its safe administration was neglected to be observed. The spirit should not be *concentrated*. As it is incapable of supporting respiration, it can by no means supplant the introduction of atmospheric air with impunity. As oxygen is essential to respiration, it would seem superfluous to suggest that it must be admitted to the lungs and *freely respired with the narcotizing vapor*. The induction of complete insensibility can hardly be regarded as hazardous with the precaution just intimated. That it is poisonous is inadmissible. That its specific impression is hostile to the proper decarbonization of the blood, is incompatible with careful observation. And it must be equally obvious that the quantity should be adapted to the constitution of the patient. The specific effect is observed to supervene much more readily in some cases than others. These observations are not intended to reflect on the discrimination of those who have encountered unexpected mischief from its employment, but it is thought their propriety must occur to the reflective mind.

As an expedient for alleviating pain, or overcoming the sensibility to the knife, the chloroform must be acknowledged alike admirable and effectual.

Yours truly,

C. Colegrove.

Marriages and Deaths in Buffalo.—The Buffalo Commercial Advertiser gives the following statement of marriages and deaths in this city for the year ending August 8th, 1848. The data, it is stated, have been obtained by Mr. E. W. Palmer, from Clergymen, Justices of the Peace, Sextons, &c.

The whole number of marriages is 791. Of this number, 501 have been by the German and French clergymen of the city.

The whole number of deaths, as reported by the several sextons, is 1,499. In addition to this number, it is estimated that there were about 50 private burials. This makes an average of about 30 per week; or, one in 1500, estimating our population at 45,000.

The Advertiser adds, that "during the time embraced, the mortality of the city has been made greater than usual by temporary causes. The ship fever and small pox prevailed to considerable extent last autumn, and carried off quite a large number soon after their arrival here, who had not

become citizens. This is shown in the report of between 300⁰ and 400 paupers, who were buried at the expense of the city."

A complete, systematic registration of births, marriages, and deaths in this city is highly desirable. If not provided for by the present law on the subject, the act should be properly amended, and it should not be permitted to become a dead letter.

Black Eagle.—A carved, black, two-headed eagle, on which the Austrian coat of arms is escutcheoned, has lately been displayed at the window of a store in the "Commercial buildings," in which our Journal is printed. By a card placed over the model, the admiring spectator is informed that it is the insignia of the agency for the Grafenberg patent medicines. As we looked at it, placed there for such an object, we could not but be struck with an appropriateness of the design in some respects. A double-headed monster, of the Falcon, or prey seizing genus, and black as Erebus, it is a fitting emblem of the business it denotes, while, at the same time, it is a grievous insult to the noble bird whose deformed image is prostituted to such base use. We trust that those who call to subscribe for the Buffalo Medical Journal, pay subscriptions, etc., will not suppose that our periodical is in any way implicated in the Grafenberg system.

Progress of the Cholera.—The following intelligence with respect to the appearance of the Cholera in England, and its progress in other parts of Europe, is taken from newspapers brought by the steamer Europa, which arrived at New York on the 25th ult.

LIVERPOOL, Oct. 14.—*The Cholera*—Several cases of this dreadful disease are reported to have occurred in London during the past week. The Times of Tuesday thus sums up the cases; 5 in Chelsea; 3 at Rotherhithe; 2 in the city of London; 2 in Spitalfields; 2 in Whitechapel; 2 in Bermondsey; 2 in Horsley-down; inclusive of those at Woolwich, 26 fatal cases have been reported.

At Sunderland two deaths have occurred on board a vessel arrived from Hamburg. One of the deceased men was a great drunkard.

At Edinburgh, on Sunday, there had been 14 ascertained cases, of which seven terminated fatally. Seven cases had also occurred at Newhaven.

The disease made its appearance almost cotemporaneously in Sunderland and in the low lying districts below London Bridge. In both places the first cases were those of intemperate sailors who came from Hamburg and were attacked by the malady on the voyage. As regards Edinburgh, the origin of the disease is left in doubt. The official report of the Registrar-General in London reported 13 cases up to Saturday last. In Edinburgh, up to the latest report, there had been 25 cases, 20 of which had proved fatal. Up to Wednesday in the present week the number of cases in London is alleged to be about 20, but a daily official report is not yet issued.

The 13 cases in London above mentioned are thus particularized in the official returns. They all occurred during the week ending the 7th inst. From that date to the 14th, the disease seems not to have made much progress:

"In Old street (sub-district,) St. Luke, at 39, Rahere street, wife of a gentleman, 59 years, disease of the bowels simulating Asiatic cholera (38 hours' duration.) In south sub-district, west London, F., 27 years, cholera (13 hours' duration.) In St. Bartholomew's Hospital, west London, M., about 40 years, Asiatic cholera. In Town (sub-district) Bethnal-green, at No. 4, Cheshire street, a weaver F., 21 years, enlargement of the heart (12 months' duration,) cholera-spasmodic (12 hours.) In Spitalfields, Whitechapel, M., 23 years, cholera (12 hours' duration.) In Whitechapel north, a girl, 4 years, English sporadic cholera (seven days' duration.) In St Paul (sub-district,) St. George-in-the-East, M., 38 years, cholera (2 days duration.) In Mile-end, Old town, Lower Stepney, M., 47 years, cholera (36 hours duration.) Mr. Castleden's (the registrar) note: Mr. Todd, the surgeon in this case, certifies that the above was a case of Asiatic cholera; and the informant states that her father (the deceased) got up on Thursday morning, about four o'clock, with a bowel complaint, for which he took some gin and ginger, and then went to his work on board ship, but which he was compelled to relinquish about mid-day. He returned home in a cab, and died yesterday morning at four o'clock. The medical gentleman was in close attendance to the very last. In Lambeth Church, 2nd part, (sub-district) at Orsett street, daughter of a chair-maker, aged 11 months, cholera, (3 days duration): convulsions (1 hour.) Mr. W. H. Wheatley, the registrar, states, "that at one end of the street mentioned above, in the centre of the road, is an open drain, which is very offensive at times—drainage to houses very bad. Scarlatina has been very prevalent there." In Rotherhithe, a boy, 11 years old, cholera (19 hours duration.) In same sub-district, F., 38 years, cholera (19 hours duration.) In same sub-district, a girl, 2 years, cholera (2 days duration.) In Greenwich West (sub-district,) F., 37 years, cholera (4 days duration.)

LONDON, Oct. 13.—The highly favorable change in the weather, it is to be hoped, has checked the progress of fatal cholera cases in the metropolis. Only one fatal case was reported yesterday—that of a person in the Tower. The attacks of diarrhoea were reported to be numerous and severe, with, however, very satisfactory statements of the success of the treatment recommended for checking the disease at once in the first stage, or in its premonitory symptoms.

HAMBURG.—Authentic accounts state that the disease is still on the increase at Hamburg. From the 1st September, when it broke out, to the 26th, there were 1330 cases, of which 650 died, 302 recovered, and 387 were under treatment. There is a great deal of sickness on board the English ships lying at Hamburg.

BERLIN.—Up to the 30th ult, there have been 1704 cases of cholera in Berlin, 1102 of which terminated fatally, 302 reported as cured, and 390 still doubtful.

ST. PETERSBURG.—The last accounts from St. Petersburg give about 19 new cases, and seven or eight deaths daily.

ALEPPO AND DAMASCUS.—The ravages of the pestilence at Aleppo and Damascus are stated to have been frightful, especially at Damascus, where

not fewer than 10,000 persons are supposed to have died within twenty days preceding the 26th of August.

Another Instance of Repudiation of the Nostrum Trade by an Apothecary.

We have the pleasure of announcing another instance in which an apothecary has renounced all connection with the nostrum trade. Mr. A. J. Matthews, of this city, a highly respectable and competent druggist and apothecary, announces [see advertising sheet] that he has disposed of his entire stock of patent medicines, and will hereafter have nothing to do with them directly, or indirectly. These instances are gratifying as evincing the commencement of a reform, which will, in time, we have no doubt, be complete. Reflecting, conscientious dealers in drugs, have only to consider seriously the patent medicine system in its moral aspects, and they cannot feel that they have discharged their duty until they have washed their hands of all participation in the business. They who have taken the lead in this matter, with the risk, if not certainty of personal sacrifice, deserve great credit. If not rewarded by pecuniary profit, they will have the priceless approbation of their own consciences, and that respect which actions dictated by principle never fail to command.

Obituary.—Died, by the accidental discharge of his own gun, on the 13th ult. (GEORGE SPRAGUE, medical student, son of Alden S. Sprague, M. D., of this city, aged nineteen years.)

The death of this promising young man, under such circumstances, occasioned a deep sensation in this community, and called forth heart felt sympathies with the bereaved parents. Possessing excellent talents and acquirements, a fine person, united with habits of diligent application, and moral qualities in every way unexceptionable, the deceased gave every promise of becoming, in after life, all that friend and parent could desire. Arrested, without an instant's premonition, at the threshold of his career, reason and consolation have no alternative but acquiescence in the inscrutable providences of the Divine Author of all human events, who is infinite in His mercy, as well as in His power and wisdom. Funeral solemnities were held at the Pearl St. Church on the 16th ult, on which occasion an appropriate and eloquent discourse was pronounced by the pastor of the church, the Rev. Dr. Lord, which, we are gratified to learn, is to be published.

Professorial Appointments and Changes.—Professors Mitchell, Gardener, Beatty and Burden of the faculty of the Philadelphia College of Medicine have resigned, and Drs. Savory, Kennedy and Vandyke appointed. The particular chairs held by the latter respectively are not mentioned in the Examiner, from which the above intelligence is taken.

Dr. Jaynes, Professor of Institutes in the Franklin Medical College has resigned.

Geneva Medical College.—The annual lecture term in this institution commenced on the first Tuesday in October. We learn that the class in attendance numbers 52. The lectures on the Institutes and Practice of Medicine are to be given by Prof. Wm. Sweetser, of the College at Castleton, Vt., appointed *vice* the editor of this Journal, who declined the appointment.

Transactions of the American Medical Association.—We learn by the "Medical News" that this volume is at length published. We have not yet received a copy, but hope soon to be able to lay a digest of its contents before our readers.

Buffalo Medical College.—The preliminary dissecting term in this institution commences on the 1st inst. The lecture term commences on the last Wednesday of this month (Nov.)

The walls of the new edifice are erected, and the roof in progress of completion. In a previous notice of this structure, we inadvertently committed an error as respects its dimensions. Instead of being 100 ft. by 50 ft. as stated, it is 100 by about 60 feet.

Our supply of editorial matter falling a little short of the reserved space, we select for the vacant niche, the following article from our contemporary, the Western Journal of Medicine and Surgery:

A Contribution to the Curiosities of Medical Experience. By T. M. HARRIS, M. D., of Harrisville, Va.

The novel and remarkable character of the following case constitutes my apology for communicating it to the profession.

On the 19th of May, 1846, I was summoned to attend a young Dutchman in this neighborhood, and received the following history of his case.

He had been suffering from an attack of piles, and having been informed that the disease could be cured by introducing the neck of a well greased bottle containing some hot spirits of turpentine, he undertook to prove the remedy. But unfortunately, using nothing larger than a half pint flask,

and having, as I suppose, a more than ordinarily capacious outlet to the alimentary canal, the flask slipped in, and the sphincter closed upon it.

Here is a dilemma—a man with a half pint flask in his rectum seeks relief; and what is to be done? Notwithstanding the case borders a little upon the ridiculous, it became, to me, a subject of most serious and anxious concern. At length, however, I resolved upon a plan, and accordingly went to a blacksmith and had a pair of forceps made somewhat after the fashion of the obstetrical instrument, with blades about seven inches long, by about three-fourths of an inch wide, and handles eight or ten inches long. These being prepared, and the blades well greased, I introduced a blade at a time so as to inclose the bottle, locked the instrument, and commenced my efforts at extraction. But the blunt end, or bottom of the bottle presenting, I soon satisfied myself that it would be no easy task to effect its removal. At length, by the force of my efforts, I smashed the flask in fragments. Having no further use for my forceps, I laid them aside and set myself carefully to work, removing it, a piece at a time, with my fingers. This I completely accomplished after laboring faithfully for about three hours. I then washed the rectum by throwing up large quantities of warm water; ordered a dose of sulph. magnesia, and in three days had the satisfaction of seeing my patient about his employment.

On the 29th of January, 1847, I was called to see the same patient, and informed that a similar mishap had befallen him, the body now introduced being a beet. I made an examination, and could trace with the finger the large end of a beet of such dimensions as to cause the utmost astonishment; and to increase the difficulties of the case, it had been retained more than 48 hours, the patient having entertained the intention of dying like a hero, without disclosing his condition; from which determination however, the intensity of his sufferings forced him to depart.

There was now a good deal of tumefaction and tenderness about the anus; and very great tenderness of the abdomen generally—vomiting had set in. I again introduced my forceps, but with great difficulty, on account of the tumefaction and soreness of the parts, and soon found that I could not make the necessary extractive efforts without having my forceps slip off: the patient was also exceedingly irritable, and could not endure the necessary force. I now took my forceps to the smith, had the width of the blades reduced one-fourth, and the points turned in so as to form a hook, obtained two or three assistants, and returned to the novel operation.

Having premised a free bleeding and the hot bath, so as to obtain a good degree of relaxation, I administered 35 drops of the tinct. opium, and having placed my patient on his knees and strapped him down tightly over some chairs, I again introduced my forceps, and quickly succeeded in bringing away a beet nearly seven inches in length, and in its largest diameter about three and a half inches.

It had evidently been selected by my patient on account of its size, in order that it might be impossible for it to be taken in; and feeling thus secure, he had introduced the small end, and pressed down upon it with his whole weight.

I now administered injections, and laxative doses, and restricted my patient to a low diet for two or three days, when he again resumed his employment.

August 30th, 1848.

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ORIGINAL COMMUNICATIONS.

ART. I.—*Remarks on Dysentery, as it Prevailed in East Bloomfield, N. Y., during the Autumn of 1848, being the substance of an Address delivered before the Ontario Co. Medical Society.* By T. G. MEACHEM, M. D. (Communicated for the Buffalo Medical Journal by request of the Society.)

It is a curious and interesting fact, confirmed by the concurrent testimony of medical observers from the age of Hippocrates to the present day, that the human constitution is prone to take on diseased action in different sets of organs or functions, at various periods of the year; or, in other words, that the different seasons of the year are marked by an aptitude to certain determinate diseases in the human system generally. What hoary experience has thus irrefutably established, unaided reason might almost have taught *a priori*, and so have forestalled experience, instead of merely corroborating it. For when we consider the numerous, great, and sudden meteoric changes of the proximate seasons, and the very opposite, though distant conditions of the remote or extreme seasons, together with the multiplied corresponding diversities in the vast vegetable kingdom, with which we hold so intimate a connexion and relation, the conclusion is pressed upon us, irresistibly, that the sensitive and wonderfully complicated organization of man cannot possibly exist in the midst of these ever-varying circumstances, uninfluenced and unaffected, but that, either for weal or woe, it must be powerfully under their control. It is true, the human constitution is so wisely framed, its adjusting and compensating powers are so

nicely and accurately arranged, and its recuperative principle is so vigilant, active, and tenacious, that it is capable of frequent and protracted exposure to these changes with little or no detriment, especially where a sufficient knowledge of the laws of life, or physiology, is possessed, to anticipate, and so ward off their evil impressions, or, having felt them, to remove them before they have time to become serious. In many cases, however, the powers of endurance belonging to the system, and the strength of its conservative principle, are so inherently weak, that there is an utter inability to cope with any but the slightest opposing influences; while, on the other hand, a profound ignorance of the physical laws of our nature, or a knowing and wilful disregard or perversion of them, at the same time that it renders that weakness complete imbecility, makes even the finest constitutions the prey, instead of the successful antagonist of these changes of season, particularly where the agencies they develop, are more than usually noxious and virulent. The individuals, then, who are not included in one or more of these categories, and therefore susceptible to the deleterious influences peculiar to different seasons, are very few; and the only reason why more do not actually suffer than observation proves to be the case, is not because they are not liable to suffer, but, because, fortunately, they are not brought into the immediate sphere of the developing or exciting causes.

Owing undoubtedly to the nature and degree of their changes, the same seasons in different years, in similar latitudes, vary widely from one another in the form, type, severity, and mortality of their maladies, as well as in the age, and, occasionally, the sex of those whom they select for their victims. While some, on the one hand, are marked by nothing inordinate in these respects, exciting no disease but such as is readily amenable to medical treatment, or as mild, even, as to pass by almost unnoticed; others, on the other hand, are marked by the most appalling traits, generating complaints that bid defiance to the best directed skill of the most enlightened physicians. Providentially removed from the sweltering heat and resulting pestiferous influences of the southern climes, to which, *par excellence*, the latter remark applies, and proportionably free from those great national curses, as they have been designated, large cities, which congregated poverty and vice too often convert into vast pest houses, it has been the lot of this portion of the country to enjoy a comparative immunity from disease. Here and there, however, at distant periods of time, the otherwise steady current of health has been rudely interrupted; and, as if to take vengeance for past exemption, sickness and death have run riot in our midst. Such

was the case in the Typhoid Pneumonia of 1812, 13 and 14, the Epidemic Dysentery of 1828, the remembrance of both which is doubtless fresh in the minds of veteran practitioners; the Erysipelas of 1845, 6, and 7, and, in some measure, the Diarrhoea and Dysentery of the past autumn. No one at all observant of the state of health in Western New York during that season, could have failed to notice the unusual prevalence, severity, and fatality of our accustomed fall complaints. In some favored localities nothing but sporadic cases of abdominal affections occurred, as heretofore, and they, for the most part, were mild in their form, and brief in their course. But the great majority of places, if, I mistake not, suffered far beyond the inflictions of antecedent seasons; while some few witnessed the very maximum of fatality consequent on the direst forms of disease that ever visited our country. As instances of the last class, *many* of our large towns might be mentioned; * and, as a notable instance, out of the state, reference may be made to Lowell. The aggregate number of deaths which occurred in these places, I know not, although I made enquiry to that end, neither, indeed, the number individually; but the public prints emanating from them during the sickly period, bear ample record of the immense mortality. As an example of the wholesale mortality in the practice of one physician alone, in a neighboring city, I was advised through Dr. ———, that, to his knowledge, a brother practitioner lost fifteen cases in a few days. In Lowell no less than sixty died in a day—a number, for the population of the place, that may challenge competition with that scourge of the human race, the cholera, in the very height of its destructiveness. Although our own immediate section of the state happily escaped the dreadful fatality that befell some other portions of it, we by no means passed through unscathed, as the experience of many among us can abundantly testify. In this town, I believe, as well as in Richmond, West Bloomfield, East Bloomfield, Victor, &c., the fall affections were unusually rife, and far more than commonly fatal, though not remarkably so. Such was the case, too, in Livonia, Lima, Geneseo, Nunda, and other towns in the adjoining county of Livingston.

As a general rule, here and elsewhere, the appearance of diarrhoea and dysentery in the late summer and early fall months, has been to some extent preceded by cases of cholera infantum. In many situations this was the case during the past year; in others, not. In East Bloomfield, for instance, I believe there was not a single case of infant cholera, although

* Among them, I have been informed, Syracuse, Lyons, Mt. Morris and Rochester, stand prominent.

there were numerous cases of the other affections. In Rochester, owing, no doubt, to the circumstance of its being a city to which, like, all other cities, more or less, there is a constant influx of pauper emigration to increase the many causes of the complaint previously existing, cholera infantum showed itself at an early date, and as soon as the month of June, put on, too, dysenteric symptoms of a well marked character—a complication, in itself, of course, by no means rare, but worthy of comment from its occurring at so early a period, and spreading so widely as it did. In July, the fevers of a typhoid type which visited the city, were noticed to possess an unusual tendency to looseness and irritability of the bowels, and dysenteric symptoms generally, such as occasional mucous stools streaked with blood; and this was especially true with reference to foreigners and the poorer class of persons. About the last of July, dysentery was met with in its decided form, and from that time forward, till the latter part of October, it raged extensively in the city and its environs. In this town, I have been told, the tendency to abdominal disease manifested itself in the form of diarrhoea, or diarrhoea complicated with dysentery, constituting dysenteric diarrhoea; there having been but few cases of genuine dysentery. Up to the 10th of August, there was but *one* case of dysentery in East Bloomfield, of which I am cognizant, and but very few of diarrhoea; but from that date, up to the 10th of November, we had numerous cases of both affections, single and combined. With three or four exceptions at Bloomfield Centre, all but one of a light character, and one or two south and south-east of the Centre a mile or so, the sickness was limited to the course of the stream on which Shepherd's Mills are erected, and its immediate vicinity, together with the neighborhood of a rivulet emptying into this stream not far from the Mills. The portion of the town thus marked out by the sickness, may be represented by a line extending east and west about two miles, following the channel of the creek, with one departing from its centre, south, and reaching about three quarters of a mile. The land through which the creek and rivulet both run, is very low compared with other parts of the town, having a porous and dank soil, and being, in fact, the temporary reservoir of the water which flows from the bordering highlands. Indeed, a large tract of the land crossed by the former stream spoken of, is still an undrained marsh. Whether the fact of these diseases evincing a preference, the past year, to low, moist situations, is a general, or a local one only, I have not sufficient data at hand positively to determine; but if the situations of Lyons, Syracuse, Mt. Morris, Nunda, Rochester, &c., &c., all lying on the line of canal, be allowed any bearing on the question,

its general character would seem to be pretty strongly corroborated. Those portions of West Bloomfield and Livonia which suffered most, were likewise low.

The type of the cases, both of dysenteric-diarrhoea and dysentery, which occurred in my own practice, and in that of neighboring physicians, was chiefly typhoid of a well marked, and, sometimes, most malignant character. Many cases which did not evince this type in their incipency, did so in their subsequent progress, being at first more akin to synocha than typhoid; most, however, manifested the unmistakable symptoms of the adynamic or asthenic state from their outset. A highly inflammatory or sthenic state of the system was so rare, that I do not remember being called to see but one case of it, and that was in the person of a robust, vigorous young man residing south-east of the Centre, out of the "infected district," though in rather a low and wet locality. As in other seasons, all classes and ages, as well as both sexes, were taken down with the disease. Between the sexes, numerically, I do not know that any preference was manifested, both suffered alike; but the condition of the patient as to the comforts of life, and his age, particularly, made a plain and sad difference in the inability to resist the disorders, as well as in their severity and result. The few deaths that occurred with us, were all among the *children* of the *poor*. And this was mostly so in other places, as Rochester, for example. The majority of the fifteen fatal cases (to which allusion has been made) in a neighboring city, were of the Dutch and Irish emigrants. That poverty and infancy should predispose to the reception of disease, and after its contraction, render it less able to cope successfully with it, is so generally conceded as almost to have become a medical axiom, a "fixed fact." For it is at once apparent, that as the capability of the system to defend itself against the onset of disease, is co-ordinate with the vital force which it possesses; and that as the degree of marked action in a given instance, is by no means commensurate with the vital force, but often runs far beyond a just proportion; weakness and frailty of that force—the legitimate fruits of infancy and poverty—must sooner succumb than strength and power.

The symptoms accompanying the affections of which I propose to treat, were, of course, somewhat varied by circumstances, as age, temperament, habits, &c., of the patient. In nearly all instances they were gradual in their commencement and progress, following a slow, though undefined course; and were widely diverse from the symptoms attending those rapid species of the complaints which we often meet with, and which are usually associated with an exalted state of the vascular and nervous systems, as

denoted by the full, hard pulse, intense pain, &c. A morbid state of the colon and rectum, and other dysenteric symptoms, were prominent traits generally. Genuine diarrhoea, therefore, was far from common; and if certain cases appeared wholly free from admixture with the dysenteric symptoms at their onset, they soon lost their distinctive character for the most part, and merged into union or amalgamation with the other affection. Some cases of this description were made so, I have no doubt, by the use of unseasonable and injurious domestic remedies. In the initial stage of the complicated, and throughout in the unmixed diarrhoea, fever was absent in the majority of instances, and the pulse, skin, urinary secretion, tongue, and appetite, were very often nearly or quite normal; the only indication of derangement in the system, being the frequent and loose stools, together with some pain or uneasiness in the abdomen, felt, principally, just previous to an evacuation. The frequency of this, or in other words, the rarity of severe constitutional disturbance in pure diarrhoea, may be accounted for on the fact, that nearly all the bad cases of diarrhoea were of the complicated form, the simple cases no sooner reaching a certain point, and evincing a proclivity toward severity, than dysenteric symptoms set in, changing at once their character. Dysenteric-diarrhoea, therefore, was seldom a light and unimportant malady. As it occurred under my own observation, it was a combination of the worst forms of diarrhoea with the mildest form of dysentery. Pure dysentery was more aggravated than this, being, as it were, a refinement in morbid action, or farther advancement in it, and reaching nearer that condition of the vital powers which is incompatible with the necessary performance of the various functions of the body, or the continuance of life. Those cases of dysenteric-diarrhoea accompanied with fever from their commencement, were usually ushered in by a sensation of chilliness, or a distinct chill, followed, in a short time, by symptoms of febrile reaction of a moderate grade. To these soon succeeded a feeling of weight or malaise in some portion of the abdomen, centering, after an indefinite period, about the pubic and left inguinal regions, while over these regions there was more or less tenderness on pressure or bodily motion, and, at the same time, there was, not unfrequently, an intolerance of firm pressure over the whole abdominal surface. With this diversity in regard to the period of the febrile accessions, the two divisions of the complaint, the primarily and secondarily complicated, were analogous in their symptoms. The appetite became very capricious, or there was complete anorexia. Nausea was a common attendant, though vomiting, unless from overburdening the stomach by drink, was rare. The tongue was

generally, but not in all cases, coated; the fur on its surface varying greatly in color, thickness, and extent; being sometimes a light, thin, narrow strip only in the centre, or a thin, extended lining of a white color; at other times the lining was thick, and of a brownish cast; and then, again, of a dark hue, dry and cracked into numerous fragments. When not furred, it now and then put on a dry, angry, crisped appearance almost, being very much contracted, and capable of but little motion, so that when asked to show his tongue, the patient could scarcely protrude its point beyond his teeth. As a counterpart to this, there was at times but very little abnormal in the state of the tongue, and that not always in the mildest cases. Some writer has sagely, I think, remarked, that the state of the tongue is a poor index of the degree or extent of inflammation in the large intestines alone, although, generally, a good one in disease of the small intestines and stomach. I think I may safely venture to say, that I have found it true; at any rate, this I have noticed—that I have very rarely, indeed, seen the red, dry, parched appearance of that organ in genuine dysentery, compared with the number of times I have found it associated with inflammatory disease of the intestinal tube higher up. And so, on the contrary, of the opposite condition of the organ. Our last fall's affections disclosed nothing to lead to a renunciation of this opinion. The secretions of the mouth were unnatural and viscid, and bitter to the taste of the invalid. The breath was sour. The alvine evacuations were numerous, thin, and scanty or copious as the one affection or the other, of which the disorder was compounded, predominated. They were very varied in their colour and composition; sometimes consisting chiefly of blood, then of mucus, then of a dark bilious matter, then of mucus mixed with blood, then of a yeast-like substance, and then, again, of a peculiar greenish matter resembling "lumps of flesh stained with bright green paint." The last appearance of the stools I witnessed but once or twice; it is produced, according to some, by a mixture of coagulated blood and bile. Tormina and tenesmus were distressing symptoms. The pulse, like the tongue, was differently affected in different individuals, being in some but little influenced by the disease, while in others it was accelerated, quick, tense, and sometimes intermitting. The state of the skin, too, varied greatly, particularly in temperature; for while, in some instances, it indicated a high degree of heat, in others, there was an unnatural absence of it, especially on the extremities. The low grade of temperature was not, however, generally complained of by the patient, nor was it, indeed, often noticed by him: on the contrary, he still felt as if consumed by a burning fever, to allay the in-

tensity of which he would cast the bed clothes from his body, that it might be exposed to the cooling air. It is said that every thing has its counterpart; and this is but the opposite of that condition of the system induced by malaria, in which, though comfortably warm as tested by the sensation of others, the patient himself complains of insufferable cold. Dysuria was an occasional attendant; and late in the disease, when fatal, floccilatio and subsultus tendinum with coma, supervened. Dysentery being, as I have observed, something like a refinement of morbid action, or a farther advancement in it, its symptoms, of course, were, in the main, those of the disorder just described, with this one wide distinction—that they were of an intenser character, an exaggeration of them. Hence, there was pyrexia, but more severe; the stools were frequent and loose, but less fecal: tormina and tenesmus were present, but they were more importunate and insufferable. In both diseases the disposition to syncope, or exhaustion, was very great, but more so in pure dysentery than in its complication; in fact, in this respect it bore a close and striking resemblance to many of the worst cases of "Epidemic Erysipelas" that have fallen under my notice. The nosological distinctions between the two complaints, were not, however, always strictly observed.

The causes, remote, of these abdominal affections, have already been stated to consist in certain changes or peculiarities of the season. Now, it becomes an interesting, and, to the medical man, pre-eminently an important question, what was the exact agency developed by these changes or peculiarities of season, through the operation of which on the human system, the complaints, so often mentioned, were produced, and what was its *modus operandi*? As medical philosophers have, as yet, failed to discover more than two competent causes for the generation of similar diseases in other places, and in other years, namely, contagion and malaria, we are bound to accept one or the other of them, in the solution of the problem before us, or else acknowledge their combined influence. Let us, then, examine, briefly, the claims which each possesses. (In speaking of the causes, be it remembered, I confine myself, principally, to the town in which I reside.) First, as to the contagion. If by this term we are to understand, what is generally meant by it, the communication, direct or indirect, of a disorder from one who is laboring under it, to one who is not, by contact with an animal poison begotten in the person of the former, I see no valid reason for inferring the contagious nature of our late fall affections. Could the disorders be shown to have commenced at a given point, and thence radiated as from a common center, as one writer remarks, the

presumption would have been in favor of their contagious nature; but this was in no instance the case. If, again, the circumstances which aid the generation and diffusion of contagion, as excessive filth and vice, crowded and badly ventilated hospitals, &c., &c., had existed here, circumstantial evidence might still have been in its favor; but they did not. Discarding, as we most assuredly must, the idea of positive proof in the premises, the strongest presumptive evidence that can be adduced in support of the position is, that the diseases attacked several persons simultaneously, or at nearly the same time, in the same neighborhood; or that those who went from a healthy locality to nurse the sick, were themselves taken down with the complaints. If I mistake not, the former supposition proves rather the non-contagiousness of the disorders than their contagiousness; for it is at least presumable that a sickness so wide-spread, and so uniform in the period of its appearance, should have had some general and diffusive cause, and could not have travelled by comparatively slow steps from person to person, else would the individuals have been brought down more in succession, more in the order of their contracting the maladies. Moreover, it can be urged as an argument against their general contagiousness at least, that *many* who suffered from them, had, most conclusively, never any communication with those similarly affected. With regard to the second point, it must occur to every one that a removal itself from an uninfected to an infected section of country, was inevitably to endanger the health of the individual so removed, by throwing him into the very midst of the causes, whatever they were, that had already produced the sickness in others. And when to this you add confinement to the sick-room, with its concomitant evils, want of pure air, constant and unrelaxed attention, night watching, mental anxiety, &c., is it at all surprising that these ascribed cases of contagion so often occurred? Nay, is it not a matter of wonder that they were not more frequent? What so effectual and unfailing a plan could the ingenuity of man devise to extend and perpetuate disease? It is rushing into the very den of the lion; and strange, indeed, if all, like Androcles, should pass out unhurt. On those who argue for the affirmative of the question before us, devolves the task of defending, on like grounds, the contagiousness of many other disorders which, they will readily concede, are not contagious: such are agues, influenzas, &c. The notion of non-contagion, is, I am well aware, in contrariety to the opinion of older and better men than myself; yet, I candidly, though with some degree of diffidence, assert, that I did not witness *one* instance of reputed communication by contagion, that could not be explained on less

questionable, plainer, and more satisfactory principles. After all, I would not wish authoritatively to declare, that, because *I* did not see a case which I was satisfied was the result of contact, and cannot be led by reasoning to the conclusion that such was the fact, others did not witness cases of the kind, and are therefore wandering blindfold in the paths of argument and truth. Positive proof is far superior to negative; and hence, he who can only say, "I have *not* seen," should bow in deference to him who knowingly says, "I *have* seen."

Secondly, what are the claims of malaria? That this subtle and invisible substance has had, at various periods of time, and in different countries, an extensive and powerful influence in the propagation and dissemination of diarrhoea and dysentery, medical history most undeniably shows. The coincidence of these diseases with the great first-fruits of malaria, the ague, or their alternation with it, has been of frequent occurrence for centuries. According to Watson, the decline of diarrhoea and dysentery in the metropolis of England, has been contemporary with the disappearance of ague, and other severe disorders, which, previous to the great fire, were produced by the bad air of pent up streets and filthy sewers. This memorable event, which was considered at the time a national cause, he therefore regards as a great national blessing. Speaking of the former appalling mortality from dysentery in London, he remarks, that "Dr. Heberden, in his valuable work, 'On the increase and decrease of different diseases,' shows that in the seventeenth century the number of deaths set down in the bills of mortality under the titles of bloody flux and griping in the guts, was never less than 1000 annually, and in some years exceeded 4000. For twenty years together, viz:—from 1667 to 1692, they every year amounted to about 2000. During the last century the number gradually dwindled down to 20,000. From the disappearance of the dysentery we may date the extinction of the ague." The same remark holds good with reference to the paludal districts of Holland and other countries. There must, therefore, have been an identity in the causes of the affections. The best explanation of the connection and just relation of the diseases, is that given by the author already referred to, and as his language is luminous and concise, I trust I shall be pardoned for quoting him again. He says:—"repeated paroxysms of ague are attended with extreme and increasing congestion of blood in the internal organs; of which congestion, the tumid spleen is the effect and token. Now whatever gorges the splenic vein, gorges its tributary the inferior mesenteric, which carries the blood from the rectum and descending colon. Upon such congestion of the mucous

membrane, inflammation is readily engrafted." Now I know of no reason why the spleen alone should be dwelt on thus emphatically, provided engorgement of any other abdominal organ will bring about the same state of the intestinal mucous membrane. A reference to the etiology of piles and hemorrhage from the bowels, shows us that this is true in relation to the liver. Congestion of that organ, however, though a frequent concomitant or effect of the ague, is not invariably so; for in some parts of the country where malaria prevails, we meet with such derangement, almost daily, in persons who never had the least premonition of the ague. It follows, therefore, that malaria may become the cause of inflammation of the intestinal canal through the medium of the liver, without the antecedence of intermittent fever. With these facts at hand, together with those furnished by the history of the diseases we are considering, as witnessed generally in this vicinity, we have most abundant warrant, I think, for the conclusion, that malaria was the great prime cause of those diseases; producing them indirectly, not through the agency of the spleen as much as of the liver. Indeed, how can the data be tortured to any other deduction? Let us investigate, for a moment, the facts connected with the history of the disorders. First, our autumnal months were characterized by protracted heat and drought, the two prime requisites to the production of malaria. Secondly, the diseases were most rife, and most severe, in and about low and, usually, moist situations. Thirdly, in these localities they appeared first, and remained latest. Fourthly, bilious difficulties of nearly all grades, from the simplest derangement up to bad cases of remittent fever, were quite common, so common, indeed, that almost every one labored under them more or less. The bilious countenance met you wherever you turned. More than once was it observed to me by those who had recently come from the west, "you have far more miasm here, than we have; your faces wear more decidedly the sallow token of its existence." Fifthly and last, the ague itself, to some extent, appeared in many of the infected districts; showing, conclusively, the presence of malaria in those districts, and yielding a fair presumption of its existence in other districts near by, and somewhat similarly circumstanced. A few cases of this affection, occurred in East Bloomfield. At Honeoye Flats and South Livonia, both of which places are situated at the foot of a lake, intermittent fever was exceedingly prevalent. My brother, who practices at the latter village, informed me, that there were in its immediate vicinity, at one time, no less than thirty ague-and-fever patients. Subsequently, as

at the Flats, diarrhoea and dysentery developed themselves there, attacking, irrespectively, those who had had the ague, and those who had not.*

On a review of these facts, thus briefly enunciated, (for I would not be prolix,) does it not appear evident that the great element in the production of our late fall disorders, was malaria? And is it not equally evident that its *modus operandi* was by causing, sometimes, congestion of the spleen, but, mostly, congestion of the liver, thereby superinducing engorgement of the intestinal mucous membrane? How far these explanations will apply to other sections of the state, and the large towns alluded to, as Rochester &c., I cannot say; but as they were all exposed to the same influences of the season, and were chiefly alike in their situation, I have no doubt they will apply, at least, measurably. In the latter instances, poverty and foreign emigration must have conduced largely to the mortality.

The plans of treatment pursued in the complaints under consideration were various; while the modifications to which those plans were subjected, were numerous, almost, as the individuals to whose hands the treatment was consigned. Paradoxical as it would seem, without taking into view the immense influence of locality in moulding and altering disease, success, to a certain extent, attended all the methods employed; in many instances, on the contrary, they were all strangely and signally inefficient. The principal methods adopted and recommended, may be classed, when analyzed, under the following heads: the depletory, the mercurial, the sedative, the sudorific, the purgative, the astringent and the stimulant. To suit the opinions or theories of the practitioner, every one of these was conjoined with one or more of the others. In the cases of simple diarrhoea referred to, much treatment was seldom necessary. Some were promptly relieved by domestic remedies, as a dose of bilious pills, a draught of brandy and loaf sugar, or salt and vinegar, a decoction of smart-weed tea, or oak bark, &c. When called on myself to prescribe, I generally ordered a purgative dose of calomel and castor oil, to be followed by Dover's powder, combined, when there was evidence of much biliary derangement, with equal parts of hydrargyrum cum creta, or small doses of calomel. Where there was an appearance of mucus in the stools, I frequently made use of the powders of ipecac and rhubarb as recommended by the German physicians, and so highly praised by Stokes; and with the success of this plan,

* In farther corroboration of the doctrine maintained above, it was stated to the society by Dr. Carr, of Canandaigua, that some western physicians were in the habit of prescribing *quinine* in dysentery as in the ague, and with complete success, viewing the *causes* of the two affections as identical.

as in former seasons, I had ample reason to be satisfied. In two or three instances connected with repletion of the stomach, I, of course, gave an emetic. Dysenteric diarrhoea, and dysentery, being much severer diseases than the simple form of diarrhoea, a more prompt, longer continued, and, where circumstances would permit, more active course was necessarily adopted. Where they were sufficiently dynamic — which was very seldom with us — venesection premised all other remedies; and the guide to the employment of the lancet, was not as much the condition of the pulse, as the degree of tormina and tenesmus complained of by the patient, as well as the bloody character of the evacuations, the amount of fever, thirst, &c. For, as Dewees remarks, “perhaps there are no affections of the system in which the pulse is so uncertain a guide as those of the alimentary canal.” Never did I find it necessary or safe, as I thought, to bleed more than once. After V. S., I generally administered a dose of calomel and castor oil, to unload the liver, and evacuate the contents of the bowels; and with this remedy, as with the lancet, I observed great caution, finding for the most part, on experience, what I had been led to infer from previous practice and reflection, that the frequent repetitions of the purgative, instead of relieving or allaying the complaint, tended only to heighten and exasperate it. I know that in making this assertion, I am treading on disputed ground, and giving an opinion on a subject about which, to use the language of Condie, “there is much discrepancy of opinion.” Not to break the thread of my remarks, however, I will postpone, for a moment, the mention of my reasons for this conclusion. After the operation of the physis, I put the patient on a powder or pill composed of ipecac, $\frac{1}{2}$ gr. blue mass and extract of hyosciamus, each, one gr., every three hours, and gave him at bed time 10 gra. of Dover’s powder. This, it will be perceived, is the method advised by Condie. If the case was severe, and I wished to allay irritation, and produce the effects of mercury promptly, I used, in lieu of the blue mass and henbane, calomel and opium, or morphine. This was continued till amendment took place, or some symptom or condition arose, such as pyalism, to contra-indicate the further employment of one or other of the articles. The peculiar depressing effects which sometimes follow, secondarily, the administration of opium, I never saw more clearly manifested than in two or three instances of these diseases: so great were they, that although no more than a moderate dose of the narcotic had been taken, the patient appeared on the point of swooning. The cause of this unusual susceptibility may be found, I presume, in the adynamic type of the disorder. After the discharges from the bowels had amended some-

what, I used a combination of ipecac, acetate of lead, and opium, which I found to procure marked relief from the symptoms of tormina and tenesmus. As early in the diseases as I dare make use of them, I employed various other astringents combined with opium in some form; doing so much earlier, and plying them more assiduously than I ever found it necessary before. The oil of turpentine and balsam copaiba, too, I prescribed in the same way. Fomentations to the bowels I ordered in nearly all cases. After the acute stage had subsided, I applied blisters to the abdomen, in the commencement of the season, but as they did not seem to afford any compensation for the uneasiness and irritation they occasioned, I almost entirely discontinued them. One case, however, was, I think, essentially benefitted by their repeated application; and that was a case in which, according to Twining, the cœcum was inflamed, as indicated by "pain on pressure of the abdomen over the region of that intestine, and a rounded, doughy, inelastic tumor, both sensible to the hand, and visible." To relieve the tenesmus, the common and highly beneficial remedies of injections of cold water, or opium rubbed up with starch, were given; but very rarely, indeed, did I sanction the use of opiate tinctures in enemas in the early stages, for the reason that I considered them unfit. And candidly, on comparing the pathology of the diseases with the medical properties of proof spirits, does it not look inconsistent to apply to a highly inflamed and exquisitely sensitive membrane, deprived of its natural defensive mucus, so active a stimulant? It may be answered, perhaps, that strong solutions of the nitrate of silver are used in the same manner with the most gratifying success. Granted. But the two articles are not designed to fulfil, precisely, the same indications; the opiate tincture is to produce a sedative effect by suppressing or suspending nervous sensibility; the caustic, to destroy it. Hence the former has no need to be combined with the stimulus of alcohol, which, in fact, becomes a partial neutralizer of its intended action—a stimulus placed in the unhappy medium, being too potent to be innocent, and too feeble to be efficacious. The favorite prescription of Morsely to subdue tenesmus, acetate of lead 1 dr., tepid water 8 oz., I occasionally exhibited. The daily employment of the warm bath in the decline of the disorders, was not forgotten. Overlooking many minor points of treatment, calculated to conduce rather to the comfort and convenience of the patient than the immediate removal of his complaint, this comprises the general medical treatment I learned to be best adapted to my own cases. One indication, however, not mentioned, I found it imperatively necessary to keep in mind; which was the careful husbanding of the pa-

tient's strength, and a vigilant guarding against collapse. To this end, mild nutriment, as rice water, and chicken broth, was given at an early date, and, soon after, stimulants and tonics, either singly or combined, in as large quantities as the system could bear. The practice of many physicians differed materially from this. Some of my acquaintances placed their chief reliance on one full bleeding, one thorough operation of a cathartic, and the use of the vapor bath so as to produce copious diaphoresis; following these up by powders of calomel, ipecac, and morphine, coupled with fomentations to the abdomen. By those who put this method of practice in force, the effects of the vapor bath were praised almost immeasurably; to use their own expression, "it was the very sheet-anchor of their hopes." Other practitioners, acknowledging no difference in the type of our late fall complaints and those of previous seasons, classing them promiscuously as sthenic, strenuously urged, and heroically adopted the treatment pursued by them in the past; and thus the very remedy which, of all others, physicians in this part least used, and most feared, to wit, venesection, was by them frequently, fearlessly, and, if we are to credit their assertions, successfully employed. A favorite prescription with some, was, small, repeated doses of calomel and ipecac, with an occasional dose of opium. Some relied mainly on astringents, such as acetate of lead, combined with Dover's powder. Others made *stimulants*, with opium, their principal dependence. A great many trusted to the little sugar pills, and, as a medical friend remarked, died or got well, the best way they could, by the "*Vis Medicatrix Naturæ*."

A word or two in relation to the question of purgatives in these complaints, which will apply to dysenteric affections generally, and I have done. I have said that this is a vexed question: it is so. For while the great body of American Practitioners is divided on it, it constitutes one of the lines of demarcation between the French and English schools of physicians, the latter contending for, the former against it. Who shall decide where so many doctors disagree? It is not for me to assume the station of the umpire, only so far at least as I am myself concerned, and I would not, therefore, without reason, foist my notions of the subject on the consideration of the Society; but the responsibility of the situation which, as members of the Society, we all occupy, compels me to state, unhesitatingly, that the plan so highly lauded by some physicians, of giving frequently, in nearly all cases and modifications of dysentery, cathartic doses of calomel, or calomel and castor-oil, or rhubarb, or rhubarb and magnesia, &c., &c., I look upon as uncalled for, injurious, and cruel, and therefore de-

cidedly *bad practice*. And for the following reasons: First, because it is diametrically opposite to that cardinal law of both medicine and surgery—derived from the example of nature herself—which requires injured and inflamed parts, to be kept in the most passive and quiescent state, and the necessity for the exercise of their functions to be diminished as much as possible. Witness the use of the bandage in restraining thoracic motion in penetrating wounds of the chest; the complete rest enjoined in sprain of the ankle, or inflammation of the knee-joint; the prohibition of the use of the eye in ophthalmia; the suppression of noise and seclusion of light in phrenitis; the forbiddance of any article making requisition on the digestive powers of the stomach in gastritis, &c.; and that from which, among other examples, the foregoing practices have been imitated, the partial cessation of costal motion in pleurisy and pneumonia, the abdominal muscles acting vicariously. Secondly, because it is directly opposed to another capital law of both medicine and surgery, which forbids the application of irritants to an already irritated surface, except in certain classes and stages of disease, (and then only in the instance of certain medicines,) neither of which exceptions, applies to the question at issue. Thirdly, because the frequent administration of purgatives has often the effect, especially in persons of nervous temperament, and weak digestive organs, to unsettle and nauseate the stomach, and render it incapable of retention, thereby—while the administration of other articles is unduly postponed—through the mysterious yet powerful influence of sympathy, compelling the patient repeatedly to stool, and inducing an unnecessary and hurtful degree of exhaustion and suffering. Fourthly, because experience has pretty satisfactorily proved that those hardened feces termed *scybalæ*, which were formerly supposed to exist in the bowels in nearly all cases of dysenteric complaints, and to dislodge and evacuate which purgatives originally came into vogue, are found only in a few cases; which paucity can not longer justify the continuance of a general rule. Fifthly, because it savors too much of the Hahnemanic dogma, "*similia similibus curanter*," which we, as physicians of the old school, repudiate.

For these reasons do I eschew the doctrine of frequent purgation in dysentery.

EAST BLOOMFIELD, Ontario Co., N. Y., Nov. 1848.

ART. II.—*Clinical Lecture on Aphonia and Stammering.* By CHARLES A. LEE, M. D. Delivered before the Medical Class of Geneva College.

GENTLEMEN:—The case presented before you is, in some respects, a remarkable one. This boy, who is now between four and five years of age, was attacked about a year since with fever, attended with a good deal of cerebral disturbance, manifested by delirium, &c., which persisted for several days. He soon, however, began to convalesce, and in a few weeks had recovered his usual degree of health. It was soon apparent, that he had entirely lost the faculty of speech. While convalescing, he was able to utter a few words, but he soon lost the power of articulation, and at the present moment, he is unable to utter a single intelligible sound; although, previous to his sickness, he was as talkative as boys generally are at his age. The parents have sent him here, from a distance, to see whether something can not be done for him, and it is our duty to examine the case, therefore, as thoroughly as possible, to ascertain if the defect may be remedied. In the first place, I would observe that the hearing of our little patient is as acute as it ever was, he understands apparently what is said to him; does as he is ordered; and judging from the expression of his features, we should pronounce him possessed of some considerable degree of intelligence.

You are aware that the formation of perfect vocal tones presupposes the possession of the sense of *hearing*; persons are dumb *because* they are deaf. They may utter a series of harsh sounds, (I speak of those born deaf) but even this is accomplished with the greatest difficulty; they can, to a very imperfect degree, learn the movements of articulation by means of their sight, so that it is not uncommon, to find some deaf persons, who understand what is said, by watching the motions of the lips and tongue of the speaker, but yet, if born deaf, such individuals, can rarely utter more than some harsh sounds like the inferior animals, for the want of hearing to regulate their articulation. For this reason, most of the attempts to teach the deaf and dumb to speak, have hitherto proved unsuccessful, although some instances are recorded, in which deaf persons have been able to carry on conversation in the regular way, regulating their voices by their voluntary power, guided by muscular sensation. It is not, then, from deficiency, or absence of this faculty, that our patient is unable to articulate.—Vocal sounds, you are aware, are formed in the larynx; whilst their modifications by which language is formed, are effected in the oral cavity. Now, if there be, from any cause whatever, an inability of producing sound,

you will necessarily have an absence of speech, which is sound articulated. In cases of ulceration, or relaxation of the vocal cords—those ligaments of the larynx, by means of which sound is generated; or, if there be no defect in the power of producing sound, if you have malformation of the oral cavity, or paralysis of the ninth nerve, you will still have absence of speech.

But in the present case, there is no abnormal conformation of the organs of speech; there is no organic change in the laryngeal structure, for he is capable of uttering loud sounds, as well as a variety of sounds—there is, apparently, no paralysis of the ninth nerve, on which the movements of speech, principally, depend, supplying, as it does, all the nerves of the tongue; there is no want of nervous supply in the lips, the movements of which are essential to distinct articulation, and which are supplied by the facial, a branch of the fifth nerve. To what cause, then, must we attribute the misfortune of our patient?

There is something else wanting besides what I have stated, in order that we have the faculty of speech. It is *mind*—speech is but the expression of ideas; ideas are the conceptions of an intelligent being; he may, from disease, have lost the faculty of reason and understanding; still he has the power of speech; often incoherent—often unintelligible—often a strange jargon of unmeaning words,—still it is speech. Now, there may be temporary or permanent want of speech from cerebral defect or derangement, from malformation, or organic lesions in that wonderful organ which is essential to the existence of ideas, of which words are the outward manifestations.

A man struck down by an apoplectic attack, does not speak, for the physical condition of his brain will not allow it to work; it is a state incompatible with its normal functions; the will, and all the mental faculties are suspended, and, consequently, the action of all the muscles dependent on the will; those of the voice equally with the rest. So, also, in the stupor from concussion, the coma from narcotics, and poisonous gases. But this is not a case of this kind. Speech, then, is an intellectual process. The infant has the same vocal organs as the adult, but it is only when the intellect has been sufficiently developed to enable him to understand the meaning of the sounds that he hears, that he undertakes to utter similar sounds, and so, by imitation, he acquires the faculty of speech. The voice of the idiot may be strong and his hearing acute, but he is incapable of speech. In short, we must seek for the organ of the faculty of language in the brain, and regard the ear, the larynx and the vocal tube as its

instruments. The ourang-outang has the vocal organs of man, but it has not his intellectual faculty of language. You see the boy is active, if not sprightly, but he is mute. He seems pleased with the merest trifles, he smiles continually, without any apparent cause; is it probable that he is idiotic? Such is my conviction. Enquiry satisfies me that his intellect is gone, not that his mind is an entire blank. But his is a condition bordering on that of some of the inferior animals, which, though possessing a certain amount of intelligence, and some of the faculties which we are too apt to suppose belong solely to man, are yet incapable of expressing their wants, or their instincts, by articulate speech: such, I say, is my conviction, after all the light I have been able to gather both from personal examination and facts communicated by his friends. Of course, our art is valueless in such a case as this. Its resources are inadequate to reach the results of organic changes, like these; all we can do is to hope that a gradual amelioration and improvement may be affected by the lapse of time, and that the vis medicatrix, may, in her silent, constant, and mysterious workings, repair the deranged cerebral organization, and build up healthy in the place of diseased structure. As his general health is perfect, I shall make no prescription, except to advise kindly treatment, and attention to those hygienic influences so essential to corporal and mental well being. Let his food be nourishing and of easy digestion; let him breathe a pure air by day and by night; let his clothing be properly regulated; his skin kept in a healthy state by frequent ablutions of cold or tepid water, and dry friction; let every effort be made to draw out, develop, and strengthen the mental faculties, for, on the success of this, hangs the entire result. The term aphonia is strictly applicable only to those cases of suppression of speech, which takes place independently of coma or syncope. It may be consequent on the tumefaction of the fauces and glottis, tumors connected with the trachea, ulcerations and relaxation of the *chordæ vocales*, as well as mechanical division or paralysis of the nerves distributed to the tongue and larynx. In all these cases, loss of voice is purely a sympathetic affection, and, probably, it is always so, for we can scarcely conceive of its being idiopathic. Many persons, if attacked with catarrh, are liable to lose their voice for a time, owing to a thickening of the lining membrane of the larynx, and the same accident is a common occurrence in chronic bronchitis. It is a very common symptom, also, in chronic laryngitis, and laryngeal phthisis, especially in its latter stages. Aphonia is very frequently dependent on atony or relaxation of the vocal chords, from over exertion in speaking, singing or shouting, sometimes

connected with particular disease of the mucous membrane, while in others, this complication does not exist. Loss of voice is not an unusual occurrence, also, in cases of syphilitic ulcerations, which attack the cartilages and soft parts of the larynx, making great havoc, and such cases are usually attended with rapid emaciation, profuse expectoration of frothy mucus, hectic fever, and the other phenomena which commonly attend laryngeal phthisis. I have alluded to its occurrence in hysteria, owing to irregular distributions of the nervous power; there we have no structural lesion, as in the former instances, no palpable disorder of the organs of speech; but it grows out of a state of general irritability, which is only to be cured by tonics and strengthening regimen. I have already alluded to the aphonia which precedes or succeeds apoplexy, indicative of cerebral pressure or loss of nervous power—always a grave accident, and not to be disregarded with impunity.

The treatment of this affection, like that of every other, must always be founded on its pathology. Its causes must be diligently sought, and, if possible, removed; when it originates from catarrh, you will find an emetic of oxymel of squills with ipecacuanha often successful, following its use by external revulsives and internal demulcent and expectorant medicines. When it arises from an acute inflammatory condition of the lining membrane of the larynx, you will often succeed in restoring the voice by free leeching to the throat, and the use of moderately stimulating gargles.

A solution of the nitrate of silver, of the strength of 40 grains to the ounce, has perhaps more uniformly succeeded in curing aphonia, when caused by inflammation, relaxation, or ulceration of the mucous membrane of the larynx, than any other single remedy. It is applied by means of a sponge, attached to a piece of whalebone, bent about an inch from the end to an angle of some 120 degrees; this is passed freely down to the vocal ligaments, after depressing the tongue by a curved spatula, and if the patient is directed to inflate the lungs fully, before passing the instrument, there will be no danger of any accidents, such as spasms, &c. You will find many cases treated successfully after this manner, by Drs. Green, Taylor and others, recorded in the pages of the New York Journal of Medicine. You will there find a case recorded of aphonia of two years, standing, with all the signs of ulceration of the vocal ligaments, cured in a short time by the daily application to the larynx, of a solution of nitrate of silver of from 40 to 60 grs. to the ounce of water, the cough being, at the same time greatly relieved. In another case of chronic laryngeal affection, with total loss of voice for two months, the affection was cured by six ap-

plications. It is not always, or perhaps generally necessary in these cases, to carry your sponge into the larynx, merely brushing the parts about the fauces will often answer equally well. This may be done with a large camel's hair brush dipped in the solution. The effect, like that of gargles, extends by contiguous sympathy down the larynx, producing contraction of the vocal chords, and an intonation of the voice. I believe in nearly all of these cases of temporary aphonia, there is a relaxation of these ligaments, and that any measure calculated to contract them, and thus render them more tense, will remove the difficulty. It certainly is so in colds, catarrhs, and chronic laryngitis, in which, however, there is often ulceration present, and I have no doubt the same conditions exists in the aphonia of delicate females, in whom all the tissues are lax and flabby. How often do we find the voice sink an octave or more from the effects of a cold; your knowledge of music and the tones produced by stringed instruments, must convince you, that under such circumstances, the pathology I have suggested, must be the true one. The effects of remedies also justify the same conclusions. How do stimulating gargles of cayenne, vinegar, &c., restore the voice, unless it is by giving tone to, and causing contraction of, these vocal strings? Nitrate of silver, galvanic electricity, and other stimulants, operate in a similar manner, and if leeches do good, it is in those inflammatory cases, where the mucous membrane is gorged with blood, and where tonicity can only be restored by emptying the capillaries, and bringing the organ back to its healthy and normal condition. I have often seen attempts made to cure this affection in delicate hysterical females, by local antiphlogistic measures, and external revulcents, but always without success, while a course of general tonics, as iron, cold showering, and quinine, with the local application of the nitrate of silver, or stimulating inhalations, as the vapor of benzoin, aromatic vinegar, fumes of rosin, &c., have generally been attended with success. You will recollect that aphonia may be owing to simple debility of the laryngeal muscles, brought on by over exertion of the vocal organs; in such cases, rest will restore the voice, if attention be paid to the general health, without resorting to the use of local remedies. You will also bear in mind that the voice may suddenly be lost through the influence of any strong mental emotion, as joy, anger, fright. If you meet with such cases, especially if they occur in hysterical subjects, you need not be alarmed; the voice will return after the system has had time to rally, and recover from the shock it has sustained. Occasionally I have met with a case brought on by a sudden change from warm to a cold air; these require scarcely any interference, as an exemption may be purchased

by removal to a dry warm atmosphere. Remember, too, that aphonia may arise from intestinal irritation, especially in children, who sometimes suffer an attack from the irritation of worms; here, anthelmintics followed by tonics, will be the proper remedies. The difficulty is greater where it is owing to an affection of the par vagum, or the recurrent nerve; and irremediable when caused by an aneurismal or other tumor pressing on these nerves. The cause here being persistent, the disease will also be persistent. When the cause is of a temporary nature, the affection, for the most part, will also be temporary, subsiding spontaneously, soon after the cause has been removed. I have but a single remark more on this branch of our subject to offer, and that is, as aphonia frequently occurs as a symptom in acute diseases, it is only to be obviated by the abatement of the original malady. In such cases, it is always a grave sign, and very often a fatal one; indicating, as it certainly does, a profound cerebral affection. A restoration of speech is always hailed as a favorable token in acute complaints, and as a harbinger of convalescence.

In conclusion, allow me to call your attention to the importance of general treatment in local affections of this nature. If the general health be robust, individuals will very rarely suffer from such attacks, and if they do, the local difficulty is easily removed. Far different, however, is it with those, who are of delicate or broken constitutions, especially if they are obliged to exert the organs of voice in public speaking, or singing; sooner or later they are sure to suffer an attack, and when once experienced, a relapse will be sure to follow, if the exciting cause continue to operate, unless the general health be reinvigorated.

In several chronic cases, I have succeeded in restoring the voice, by advising the patient to take the tour of Europe, or a long sea-voyage, or changing his occupation to one requiring less use of the vocal organs, as farming, &c. The free use of cold water by sponging the body, especially about the throat, followed by dry friction, has been attended with the best results. Freedom from mental anxiety, is almost essential to a cure, for the parts about the glottis seem to be the centre of fluxion, and nervous irradiations, in all affections of human system, as hydrophobia, hysteria, thymic asthma, &c. In short, the patient must, if possible, be free from mental iniquitude; breathe a pure atmosphere; take abundance of exercise in the open air; live upon plain, nourishing and easily digested food; avoid all alcoholic stimulants, as well as tea, coffee, and tobacco; and I have no fear, but that the disease, if present, will speedily be removed, and that

when once removed, if the same mode of life be continued, there will be but very little if any danger of its return.

Here is a case of a different kind. There is not a total inability, but a difficulty of speech, which is indistinct and imperfect, because the sounds do not follow each other as they ought to do; it is a case of *stammering*—now this is a singular vocal phenomena, and one which has led to some curious speculations on the part of certain physiologists, and still more singular practice on the part of certain surgeons. While some have located the difficulty in the larynx, others have found it in the mouth, and so have set about to remedy it by cutting the genio-hyo-glossi muscles, whose office it is, to pull the tongue downwards and backwards, and draw the hyoid bone upwards. How such an operation is to remedy the difficulty is not so obvious; it would seem to offer about as much chance of success as severing the *tendo-achilles* to cure the staggering of a drunken man.

Stammering, you know, consists in a momentary inability to pronounce a consonant or vowel, or connect it with the preceding sounds. The difficulty may exist in any part of a word, the beginning or the middle; if the obstacle occur at the middle, then the first part is repeated several times before the latter half can be pronounced. This repetition of the commencement of a word is only a new attempt to overcome the obstacle, and the impediment will be the greater if the word begins with one of the explosive consonants, (b, d, q, p, t, k,) which do not admit of a continuous pronunciation until the formation of a vowel is attained, as in the word bitter, which is pronounced b-b-b-b-bitter. The continuous consonants are got along with much easier, such as m, v, n, g, r, l, or s. The difficulty would seem, sometimes, to consist in connecting the consonant with the succeeding vowel, sometimes in uttering the first consonant of a word, and if you closely watch a stammering person when attempting to speak, you will see that the difficulty seems to consist in the momentary closure of the glottis; the air, necessary for the articulation of the sound, does not escape from the larynx. The obstacle does not exist in the mouth; the individual has sufficient control of his lips and tongue, but he cannot command a sufficient quantity of air to produce the necessary sounds. This is undoubtedly owing to a spasmodic state of the muscles of the glottis, the *thyro-arytenoid*, which bring the ligaments of the glottis into contact with each other, and this depends on a morbid association of the muscles of the larynx with the movements of the organs of articulation. The stammerer finds no difficulty at all in bringing his lips into position for uttering any of the consonants, but as he has no control over the glottis, he cannot regulate the

passage of air, by which the desired sounds are to be made, it stops at the larynx. Just watch a stammerer while he attempts to speak. What frightful contortions! There is evidently a desperate struggle going on in the glottis; all the muscles of respiration are called into exercise to overcome the spasm which prevents expiration; the veins of the neck become distended, and the face flushed from congestion of the brain while its muscles are violently distorted, owing to the same spasmodic effort. The cause of the phenomena, then, is understood.

Is there any cure for stammering? I believe there is, but not in the Surgical *Armamentaria*, nor in the *materia medica* proper. We read that Demosthenes cured himself of stammering by speaking with a pebble under his tongue. Mrs. Leigh who has had great success in curing this difficulty, has availed herself of this hint, and directs her patients to elevate the tongue, raising the point towards the palate. Stammerers will tell you, that if they allow the tongue to lie low in the mouth, they find it much more difficult to articulate than if it is somewhat elevated. It is an excellent plan in the treatment of these cases, to direct the patient to sing his words, and you know that persons who stammer can sing much better than they can talk. In this way the attention is directed more to the larynx, and its muscles are brought at length under such a degree of control, that the habit of stammering is nearly, or quite overcome. If we could devise a method, by which the glottis could be kept permanently open, I doubt not, that the habit could easily be cured. I know no better way of voluntarily keeping it open, than that recommended by Dr. Arnott, viz: that the patient should connect all his words by an intonation of the voice continued between the different words. A still later mode of curing the difficulty, is that suggested by Müller viz: of reading sentences, in which all letters, which cannot be pronounced with a vocal sound, viz, b, d, q, p, t, and k, are omitted, and only those consonants included, which are susceptible of an accompanying intonation of the voice; which should also be prolonged, as in singing. This plan, while it keeps the glottis open, combines articulation with vocalisation. After practising in this manner for a while, the stammerer should then proceed to the mute and continuous consonant h, and the explosive sounds q, d, b, k, t, p. This mode of treatment, followed up, I believe will cure most cases of stammering, however bad they may be, but then it will require great perseverance on the part of the patient, and patience on the part of the instructor, if there be one; although I see no necessity for a teacher, after the principle has been fully explained, and understood. The patient is to study very carefully the

manner of articulating the different letters, and then pronounce them repeatedly, slowly, and analytically. As soon as he can master sentences from which the explosive consonants have been omitted, he is to pass on to others in which they are sparingly introduced, and so on to ordinary language. Confidence in himself, and in his ability to command the muscles of articulation, is of the highest importance to the stammerer, and this can only be acquired in the manner pointed out, viz: overcoming obstacles by degrees, and proceeding step by step from that which is easy and practicable, to that which is more difficult.

Nov. 1848.

ART. III.—*Case of Hemorrhagic Effusion into the Peritoneal Cavity.* By JONATHAN KNEELAND, M. D.

To the Editor of the Buffalo Medical Journal:

SIR:—On the night of Oct. 18th, I was summoned to the aid of John Hayne, aged 40, an Englishman, laborer on a farm. I found him in a sitting posture, groaning in a short subdued manner at each expiration; breathing somewhat hurried and thoracic; countenance expressive of great anxiety; tongue clean; and pulse 100, quick, and compressible. Several weeks previous he had been attacked with dysentery, which yielded to domestic remedies. This was followed by several attacks of colic, attended by discharges of a drop or two of blood and mucus with his fæces, for which no physician had been consulted.

The day previous to his final attack was cold and misty, the ground covered with wet snow, and during part of it he labored out of doors with his feet cold and damp, and, as he expressed it, "strained himself across the weak place in his bowels," which remained since his dysenteric attack. He retired to bed at night feeling pretty well, but about eleven o'clock awoke in great pain, and desired his wife to read prayers, declaring that he should certainly die, for "'tis a death pain, I feel it." He vomited frequently. The pain which at first was low down in the abdomen, soon spread over the whole of it, but continued most severe in the lower half. The integuments were tense; bowels moderately full, but no knotty, or tympanitic feel yet discoverable, and no evacuations *per ano*. Pressure over any part of the bowels was extremely painful; hands and feet cold; gulping and hiccough alternating. Prescribed pediluvium, sinapisms, cal. grs. v., morph. $\frac{1}{2}$ gr. every hour. The vomiting subsided, but, the pain not yielding, in 3 hours I gave $\frac{1}{2}$ gr. morph. and 10 drops laudanum, and repeated every half hour. No diminution of pain, nor other therapeutical effect followed,

the administration of the anodyne, and at the fourth dose I desisted, as the pulse grew smaller and more frequent, and he seemed to sink rapidly. Six hours from the attack I commenced the use of enemata, emollient at first, afterwards stimulating and sedative, but dared not use the lancet, or tobacco injections, from the extreme and rapidly increasing prostration. Finally, I passed Reed's gum elastic syringe pipe into the colon, and threw up enemata several times. At first fetid gas escaped, and the enemata were soon returned without faeces. The least muscular effort now caused irregularity of the heart's action and loss of breath, and in 17 hours from the onset of pain he died.

After much delay, owing to the officiousness of a female neighbor who endeavored to prejudice the family against an autopsy, I obtained their consent, and proceeded to the examination. Upon the first incision through the peritoneal lining of the cavity of the abdomen, a dark, turbid fluid gushed out, staining the scalpel, hands, and vessel in which it was received, like blood. Nearly four quarts were collected. The contents of the abdomen were forced high up: the stomach, liver, pancreas, and spleen, being half a finger's length above the lower extremity of the sternum. These organs, as also the upper part of the ileum, the jejunum, and duodenum, were paler than usual, and the viscera in contact with the gall-bladder were not discolored from transudation of the bile, as I have often observed in other cases. The lower two feet of the ileum was *black*, not dark violet, but *black*. The caput coli was of a dull mahogany color, shading off to a light pink, and here was the only part of the bowels where minute, branching blood-vessels were discernible. The stomach was empty, but the small intestines were distended with offensive gas, and about 1½ pints of a dark tarry fluid, such as mercury sometimes causes. The colon and rectum were nearly empty, and the ileo-cæcal valve pervious; still no fluid, or gas, were found below this point. Owing to the near approach of the funeral hour, I was compelled to conclude without examining the mucous lining of the darkened intestine, as I should otherwise have done. My own impressions were, that mucous ulcerations had supervened upon the dysenteric attack, and from the conjoined influence of cold, and labor, which taxed the abdominal muscles unduly, the muscular coat and cellular tissue gave way, and thus was set up, what John Armstrong in fasciculus 3d, page 90 to 98, calls sero-enteritis, which ran rapidly into gangrene. Abercrombie and Andral both notice a similar form of enteritis, with sanguineous effusion and blackened bowel, becoming fatal in a few hours. Abercrombie bled his fatal cases. My patient, I believe, was dying before I was called, but

I handled the lancet and his pulse alternately for some time before I fully resolved to let him die, without my hastening the event professionally. I expected to find intus susception, and although none was found, it seemed highly probable that a portion of the ileum had passed through the ileo-coecal valve, as here was the terminus of the black color, and above were fluid fæces, but below none whatever.

Whether the fluid was blood in a dissolved state, or sanguineous serum, let others determine. I am inclined to think the former. If so, whence came it? Does hemorrhage, even take place from serous membranes? *

Yours truly,

BORODIKO, Oct. 25th, 1848.

JONATHAN KNEELAND.

ART. IV.—*The Transactions of the American Medical Association.* Instituted, 1847. Vol. 1: Philadelphia: Printed for the Association. By T. R. and P. G. COLLINS. 1848.

The publication of the transactions of the American Medical Association, which, for some time, has been impatiently looked for, has been at length completed, making a handsome octavo of four hundred pages. The minutes of the annual meeting at Baltimore, May 1848, come first in order and occupy 46 pages, a condensed abstract of which was submitted to our readers shortly after the meeting was held. The remainder of the volume is devoted to reports of the several committees appointed at the previous annual meeting of the Association, and appended documents.

We had intended, before the transactions were received, to prepare, upon their reception, a digest of these reports for the pages of our journal.

* NOTE, BY EDITOR.—It seems probable from the foregoing account, that ulcerations of the lower portion of the ileum existed, and that perforation of the intestine occurred at the time of the attack. The sudden access, the symptoms, and speedy termination, favor that opinion. The pathological appearances, also, go to sustain it. It would appear, under this view, that hemorrhage into the intestinal canal must have taken place shortly before perforation occurred; and the escape of blood in considerable quantity into the canal, conjoined perhaps with some obstruction at the ileo-coecal valve, would be likely to prove the immediate cause of the perforation. The fluid contents of the peritoneal cavity, and the intestinal canal, appear to have been similar in character, making allowance for the chemical action of the intestinal gases, and secretions upon the latter.

An opportunity for a more leisureed examination, (if the above supposition be correct) would have enabled the reporter of the case to have discovered the ulcerations and perforated orifice. The report would be more satisfactory, if it stated whether gas existed within the peritoneal cavity, if it had the odor of sulph. hydrogen: or if the contents of the peritoneal cavity emitted this odor; also, if the appearance of the peritoneal membrane had been more minutely described; but we are well aware, from experience, how difficult it often is, from limited time, or the opposition of friends, to conduct autopsies in private practice as minutely as could be desired.

But we find, on their perusal, that the subjects of which treat are as much condensed, in the reports themselves, as due regard for their merits will admit of, and, hence, it would be difficult to do the subjects, or reports, adequate justice without transferring the latter, entire, to our columns. Besides, it is to be hoped that a large portion of our readers will procure copies of the Transactions. We would urge upon all the propriety of so doing, not only because they are well deserving perusal, but in order to encourage and promote the objects of the Association in their publication.

We shall simply enumerate the several reports, and papers annexed thereto, with a few words of comment, and occasional quotations. Some portions we shall select for the eclectic department of this number, and succeeding numbers of our Journal.

Report of the Committee on Medical Sciences.—This report is submitted by Dr. W. T. Wragg, as Chairman of Committee. Prof. Dickson, of New-York, was originally the Chairman of this Committee, but declined serving, owing to pressure of other duties. This report embraces, about fifty pages. The materials, for the most part, are gleaned from contributions to various medical Journals during the previous year. The subjects are classified under the following heads:—Anatomy and Physiology, Hygiene, General Pathology and Therapeutics, and Medical Jurisprudence. The plan pursued by the committee is to select from among the mass of facts, theories, etc., propounded by different writers, during the year, those which seem most worthy of attention. The range of inquiry is extensive, and, as the committee remark, the difficulty is rather in "choosing well, than in collecting abundantly." We could have desired to find some of the topics which are presented, treated at greater length, but this, we are aware, could not be done without rendering the report very voluminous.

The committee express a decided opinion that the fevers distinguished as typhoid and typhus, are identical. In this opinion, as it seems to us, all who have devoted to the subject unbiassed investigation, must concur. We know of no reason why this is not now to be considered one of the *fixed facts* of medical science, except that it would be agreeable to oblige some truly distinguished observers who are committed to an opposite doctrine. We trust, however, and believe, that those observers will not ask this much of the complaisance of their brethren, but will be ready, in view of the evidence now before the profession, to confess, frankly, that they have been mistaken. To discover truth is, generally, considered meritorious in proportion to the difficulty attending the discovery; to recede from error is often more difficult than to develop new truth, and,

hence, is scarcely less honorable. He is but poorly qualified to make progress in scientific knowledge who resolves that his opinions at all stages of his career, shall be consistent with each other.

Report of the Committee on Practical Medicine.—Prof. Joseph M. Smith, of New York, was the chairman of this committee. The report, which covers above thirty pages, is wholly occupied with Epidemic diseases, and, chiefly, with Epidemic Typhus. A general account is given of the fatality of this disease in different parts of the country, and of its supposed causes, which is somewhat meagre in its character, although, it is to be presumed, the author appropriated all accessible information on the subject. It is deeply to be regretted that we have not more complete historical accounts of this disease as it has been presented at different places, and, particularly, at New York city, where the cases have been so numerous. Several papers of interest and value have been communicated, but what we could desire, is, not only the deductions or opinions of those who have had opportunities to study the disease, but data from which members of the profession may be able to draw, each his own conclusions. We could wish, in other words, for such histories as the history of Continued fever at the Hospital La Charite, by Louis—histories, in the first place, embracing a large collection of cases, and, in the second place, based upon observations of their symptoms, treatment, pathological appearances, etc., accurately observed, carefully recorded and numerically collated. The character of the fever, in the living and dead body, would then have been determinable; we should not have to make allowances for the bias of pre-conceived opinions, and the results would be as reliable, and perhaps as valuable, a century to come, as now. We had hoped for such a history of the epidemic at New York from the committee appointed by the Academy of Medicine, but we have looked in vain for the final report which was promised in the report of their preliminary examinations. A tempting opportunity for meritorious services and distinction has been suffered to pass by unimproved, to say nothing of (what is of much greater consequence) the loss to science and humanity. Some valuable contributions to numerical investigations of this disease have been made, but their value has been limited in consequence of their being restricted to a small number of cases. The report of Dr. Sargeant, of Philadelphia, deserves particular commendation in this connection.

Prof. Smith considers at some length, the identity of Typhoid and Typhus fevers, and arrives at the conclusion that they are identical.

Appended to this report is a truly valuable paper by Gurdon Buck, M.

D., Surgeon to the New York Hospital, etc., on "*Oedematous Laryngitis, successfully treated by scarification of the glottis and epiglottis.*" The details of five cases are given in which scarifications were practiced with success in this imminently dangerous form of disease. The subject is illustrated by four well executed engravings. This paper will claim farther notice hereafter.

Report of the Committee on Surgery.—This report is by Dr. Geo. N. Norris, and, as the reader would expect, after naming the author, it is an excellent digest of contributions to the stock of surgical knowledge during the previous year. Considerable space is, of course, allotted to anæsthetic agents. Accompanying the report, is an essay on the latter subject by H. J. Bigelow, M. D., of Boston, Mass., together with statistics derived from the Mass. General Hospital, and communications from several surgeons in relation to the same subject. The committee also communicated a paper by Dr. A. Dubois, on "*Ophthalmitis Post Febrilis,*" a severe form of inflammation of the eye, following Typhus fever, as it appeared in the city of New York in 1847-8.

This report extends over more than sixty pages of the volume.

Report of the Committee on Obstetrics.—This is brief, occupying only seven pages. Dr. Harvey Lindsly was the chairman of this Committee. The application of anæsthetic agents to midwifery practice is the only subject discussed. Appended to the Report, are the opinions of several eminent obstetricians, respecting the safety and advantage of anæsthetic influences in labor; also a communication from Dr. Markall, of Maryland, on the use of ice to promote uterine contractions; and a communication by Dr. Blackburn, on the use of a decoction of the roots of the cotton plant, as an emmenagogue.

Report of Committee on Education.—Prof. A. H. Stevens was Chairman of this committee. After some sound and judicious remarks upon the present state of Medical Education in the United States, the circumstances which affect it unfavorably, and the means by which improvement is to be made, the committee submitted several resolutions, which we quote in full, as amended and adopted by the Association. They are interesting and valuable as expressive of the sense of the majority of the members of the Association with respect to Medical Education—a subject of vast importance, and which, more than any other subject, was involved, in the origin of the Association. The Resolutions are as follows:—

1. *Resolved, therefore, That this Association earnestly and respectfully appeal to the trustees of hospitals to open their wards for the purposes of*

clinical instruction, satisfied that they will thereby more efficiently aid the cause of humanity, and more perfectly accomplish the benevolent intentions of the founders of the charity.

2. *Resolved*, That this Association considers defective and erroneous, every system of Medical instruction which does not rest on the basis of practical demonstration and clinical teaching, and that it is therefore the duty of the medical schools to resort to every honorable means to obtain access for their students to the wards of a well-regulated hospital.

3. *Resolved*, That the practice of appointing physicians and surgeons to the charge of an hospital on political or other grounds than those of professional and moral worth, is inconsistent with the welfare of its inmates, and, of consequence, inhumane and unjust, subversive of the objects of its founders, and incompatible with a conscientious association of the high responsibilities devolved on the appointing power.

4. *Resolved*, That this committee reiterate and strongly recommend to the Association a practical observance of the resolutions appended to the report of the committees on preliminary education, and on the requisites for graduation submitted to the Medical Convention which assembled in Philadelphia in May, 1847.

5. *Resolved*, That the faculties of the different schools be requested and advised to institute daily or weekly examinations recapitulatory of the previous lecture or lectures, and take such measures as may enable them to ascertain the regular attendance of the students upon the lectures up to the close of the term.

6. *Resolved*, That this Association recommend to the faculty of each medical school to conduct the final examination of candidates for the diploma, in presence of some official person or persons properly qualified to recognize the attainments of the candidate, but who has no pecuniary interest in the institution, or in the number of its pupils.

7. *Resolved*, That it be also recommended, that in lieu of the usual inaugural thesis, or in addition thereto, each candidate for the diploma be required to present to the faculty at or before the time of final examination, a report drawn by himself, and from his personal observation of not fewer than five cases of disease, and upon which he shall be duly examined.

The difficulty of obtaining information upon some of the subjects upon which it is required to report, induces your committee to offer also the following:—

8. *Resolved*, That the faculty of each medical school be requested annually, and as early as possible to furnish the chairman of the committee on education, with a statement of the number of pupils and graduates of in their respective schools, together with such other information as may expedite the labors of the committee, and enable it to discharge the duties assigned by the constitution under which it acts.

Report of the Committee on Medical Literature.—This report, by the chairman of the Committee, Prof. O. W. Holmes, has much of that vivacity and pungency which characterize the author's writings. It has been thought by some to contain some remarks a little too caustic in their tone; but this arises, doubtless, from the author's epigrammatic style, which leads him to express, occasionally, more than, probably, he intends. We

may say of this, as of the other reports, that, to have done the subject full justice, it should have been more elaborate, but, then, it should have been greatly extended, and would be less likely to have been generally perused. The author shows, as we think, a spirit of fairness and candor, and his strictures appear to us, in the main, just. It is to be considered that the duty of this committee was peculiarly difficult and delicate. It is far easier to gather together important facts, for a given period, bearing upon a particular department of science, than to examine all that comes under the denomination of medical literature for the same period; and to report upon the relative merits of the latter, is not a very agreeable office, when it is considered that the contributor of every article for a medical Journal thinks his effusion should by no means be overlooked. Dr. H., after giving a brief historical sketch of the rise and progress of medical journalism in the United States, notices, seriatim, all the medical Journals now published in this country, mentioning some of the more interesting articles which they have, respectively, contained. That some valuable articles have been overlooked in this synopsis is certainly true, but it could hardly be otherwise.

On behalf of the craft, we might take exceptions to his comments on the repetition of similar articles in different periodicals. To quote his language, "the ring of editors sit in each other's laps with perfect propriety, and great convenience it is true, but with a wonderful saving in the article of furniture." We look upon this as a *jeau d'esprit*, at which we can laugh as heartily as any other reader, and as at any other good natured hit. In this light we presume the author considers it, for he must, of course, be sensible that one of the functions of a journal is to reproduce for its readers the valuable articles which appear in contemporaneous periodicals. This would be superfluous if each journal circulated among the same readers, but it is otherwise; each has its own circle. If any injustice were done to the journals whose pages furnish the most liberal stock for general appropriation, *they* would be likely to complain, but who ever heard of such a complaint! We have heard complaints that some journals did not do justice to others in its selections, but never that they copied too liberally. So far from being considered a disadvantage, it is quite the other way, every excellent article which creeps into other journals being so much testimony to the value of the journal from which it is taken. The real subjects of the satire are members of the profession generally, who do not contribute to medical periodicals as liberally as they should; and, in this respect, the satire hits the author of the report more than any other individual that we know of. Why does he not write oftener

for medical journals himself, and assist to save us poor editors from sitting so much in each other's laps? We promise that our Journal shall contain as many number of pages of eclectic matter less the usual average, as he will occupy by something from his own pen.

We quote what Dr. H. says of Introductory Lectures:—

"In connection with periodical literature, it seems proper to allude to the 'INTRODUCTORY LECTURES,' of which so large a number are delivered and printed annually. They must not be judged too harshly, for they are delivered to young men, who like high seasoning, and they naturally partake somewhat of the character of advertisements. Many of them are agreeable and appropriate performances, but others are open to severe comment. Turgid and extravagant attempts at eloquence, a fondness for effete Latin quotations, a parade of scholastic terms where simple ones only are called for, an inclination to adopt the cant phrases of political and literary writers, are the common faults of these productions. The physician should remember, that his style has no more occasion for pomp of oratory and glitter of epithet, than his costume for the gold lace and feathers which belong to the chieftain. Nothing is more offensive than an attempt to tell that which should be said plainly and decently, in high flown language. It vitiates the taste of the student who listens to it or reads it, and exposes the profession to derision from those who cannot value the important truths disguised by such ill chosen finery."

For the benefit of those who may not peruse the report, we make, further, the following quotations:—

"It cannot be denied that the great *forte* of American Medical Scholarship has hitherto consisted in "*editing*" the works of British authors. The Committee are not disposed to disguise the fact that this business has been carried on in a very cheap and labor-saving fashion. A tacit alliance between writers and publishers has infused the spirit of trade into the very heart of our native literature. The gilt letters of the book-binder play no inconsiderable part in the creation of our literary celebrities. Sometimes the additions by the "American Editor" have been real and important, oftener nominal and insignificant. The following calculation of the proportion added to different recently published works, taken at random, will show the average amount of material so contributed. The Editor's proportion was, in two instances, one-fourth; in two more, one-eighth; in one, one-ninth; in another, one-tenth; in others, one-fifteenth, one-seventeenth, one-nineteenth, one-twentieth, one-twenty-eighth, one-fifty-ninth, one-sixty-fifth, one-ninetieth, one hundred and seventh, and, in one instance, such a sprinkling as a penful of ink might furnish, and leave enough to spare for a flourishing autograph. The fairest fruits of British genius and research are shaken into the lap of the American student and the great danger seems to be, that in place of the genuine culture of our own fields, the creative energy of the country shall manifest itself in generating a race of *curculios* to revel in voracious indolence upon the products of a foreign soil!

In viewing the great branches of Anatomy, Physiology, Surgery, Obstetrics, and Practical Medicine, it will be seen at once that the first

four are essentially the same to the American student that they are to his European models. As might be expected in a new country, the practical branches have almost exclusively occupied the attention of the medical student. The contributions to Anatomy and Physiology have been few, and for the most part insignificant compared with those which have emanated from the countries of Hunter, of Bichat, and of the Meckels. Of all the practical branches, Operative Surgery, a most important and attractive pursuit, but still, as its name (*chirurgery*) literally imports a *handicraft*, has been the favorite, and whatever credit belongs to boldness, ingenuity, and dexterity, may be claimed, without fear of dispute, for its American practitioners.

Two fatal influences have acted not merely on medical science, but on all natural science in this country. The first is the habit of indolence generated by the easy acquisition of a foreign literature which seems to answer every necessary purpose. The second is the habit of negligence which springs from the curious fact of a constant parallelism, which is not identity, in most natural objects and phenomena of the New World, with something of the older continent. In literature this has enfeebled the relation between words and realities; in science it has induced the same laxity and incoherence. The American constitution must be studied by itself—it differs from the European in outline, in proportions, in the obvious characters of the skin and hair—why should it not differ in the susceptibilities which, awakened, become disease? The American climate re-moulds the European, and casts a new die of humanity—will it not generate cause of disease different from those of the Old World. Over this virgin soil a new Flora is weaving her long web of tapestry, flowing from the lichens of Katahdin to the myrtles of Cape Sable; is there no undiscovered healing in any of its leafy and blossoming folds? Here is the true field for the American medical intellect; not to set English portraits of disease in American frames; not to trust for immortality to a little more or less of manual adroitness or questionable hardihood; but to co-operate with that fast-gathering band of students who, in other departments of science, are studying what nature has done with her American elements, and teach us what disease is here, how it is generated, and what kindly antidotes have been sown in the same furrows with its fatal seeds."

Passing by the reports of the chairman of the committee on Publication, and the treasurer, Dr. Isaac Hays, which are occupied with financial details, we come, next, to a code of ethics adopted by the Philadelphia college of Pharmacy, and reported to the Association by the officers of the college. The code prohibits members of the college from originating and preparing medicines, the composition of which is concealed from other members, or from regular physicians, and *recommends* "the propriety of discouraging their employment when called upon for an opinion as to their merits." This is very well as far as it goes, but rather a moderate step in the way of reform. We take pride in stating that the two apothecary shops in this city to which the greater portion of the prescriptions of the physicians of the city are carried, have discontinued the sale of secret remedies. Good

resolutions are very well, but good acts are far better. We would say to the members of the Philadelphia College of Pharmacy, do as the two most prominent apothecaries of Buffalo have done.

Next follows a *statement in relation to the United States Naval corps*, by two delegates to the Association from the U. S. Navy. It appears from this report, that the Naval corps, "after long continued and arduous efforts," have attained an "assimilated rank with medium classes of their military brethren." The Association passed a resolution expressing their gratification at this fact, which was communicated to the Hon. the Secretary of the Navy, by whom its reception was subsequently acknowledged in complimentary terms.

Next, follows a "*communication on Hygiene, from the medical department of the National Institute.*" This communication, after some considerations tending forcibly to portray the importance of investigation with reference to sanitary improvements, closes with the following recommendations:— 1st, The establishment of a permanent committee on Hygiene. 2d, A recommendation to the various State Legislatures to establish throughout the Union, uniform systems for the registration of births, deaths and Marriages." On reference to the proceedings of the Association, we perceive, that, after being referred to a committee for consideration, the above recommendations were adopted, and a committee of twelve appointed, of which, James Wynne, M. D., author of the communication from the Institute, was made chairman.

Thirty pages of the transactions are devoted to a report of T. O. Edwards, M. D., of Ohio, member of Congress, being the substance of a report made to the House of Representatives on the importation of spurious drugs. This able report has been pretty extensively circulated as a public document, and has been already noticed in our pages. We are glad to see it among the transactions of the Association.

The standing Committee on *Registration of Births, Marriages, and Deaths*, by the chairman, Dr. Jno. H. Griscom, made a short report, stating that a law providing for such registrations in the state of New York, had gone into operation, and that steps have been taken in several states, preliminary to carrying into effect the recommendation of the Association on this highly important subject.

Report of the Committee on Indigenous Medical Botany.—This report is quite brief (seventeen pages) considering the wide range of investigation which the subject admits of, and indeed claims. The chairman, Dr. N. S. Davis, after some remarks on the importance of the study of Botany to the

medical practitioner, notices the following indigenous plants:—Rumex, Yellow Dock, Hamamelis, Witch Hazel; and Cimicifuga Racemosa, Black Cohosh. The author states, by way of apology for the meagerness and limited extent of the report, that although he addressed letters to all the members of the committee, (which were numerous, embracing practitioners in several states) soliciting materials for the report, he received no returns except from two, and these at too late a date to incorporate in the report. This committee, by a resolution of the Association, were instructed to continue their researches during the present year. Next, follow reports on the number of medical practitioners in the states of Virginia, Massachusetts and Delaware, respectively. Next comes a paper communicated by Gurdon Buck, Jr., M. D., giving an account of "*a new feature in the anatomical structure of the genito-urinary organs, not hitherto described.*" This is illustrated by a plate. We must refer the reader to the paper itself, for an account of this supposed anatomical discovery. Finally, the volume concludes with a catalogue of the officers and permanent members of the American Medical Association.

In closing this skeleton review, we would again express the hope that this volume, and succeeding volumes of the Transactions of the Association, may have an extensive circulation among the Profession of this country. Their intrinsic value, doubtless, is a sufficient basis for this recommendation; but, in addition to this, an interest in the Association, and an American spirit will thereby be fostered. The circulation of these annual transactions will, also, tend, in no small degree, to stimulate the exertions of those appointed to report on scientific subjects; it will encourage voluntary communications; and, what is very essential, will furnish a revenue sufficient for the expenses of publication.

In contemplating what has already been accomplished by the Association, and its present position, the Profession have much cause for gratulation. The difficulties always attendant upon the inception of a great enterprise, have been happily surmounted, and it now only remains to sustain and perpetuate an institution, which promises results equal to the anticipations of the most zealous and enthusiastic of its founders.

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Relations existing between the Clerical and Medical Professions—the Christian Examiner and the Hydropathic delusion.

The following article will commend itself to our readers by the pithy truths which it sets forth, as well as by the sprightly, humorous vein in which it is written, and will serve to relieve the staid gravity which generally pervades the pages of a medical journal. It appeared in the Boston Medical and Surgical Journal some weeks ago, and was marked, at that time, for publication in our Eclectic Department, but has been hitherto excluded by articles of a more strictly professional character. Our stock of selected matter not being very pressing with this No., we give it insertion, believing that our readers will thank us for a half hour's entertainment adapted to those seasons of indolence, in which sober, scientific reading would prove an unwelcome task.—ED. BUFF. MED. JOUR.

A recent number of this Journal gives an account of a vote introduced, and laid on the table for future consideration, at the meeting of the Connecticut Medical Society, the intent of which was to rescind that part of the code of medical ethics or usage by which physicians have declined compensation from ministers and their families for professional services. The innovation was based and defended on the ground that the deportment and feelings of the clergy, as a body, had broken off and annihilated that mutual relation of respect and support, on which so kindly a consideration had been so long sustained in New England. This regard to the ministers of the gospel is still more honorable to the physicians, when it is recollected that the service was from the poorer and worse compensated servant of the public, towards the less laborious and better paid; that is, if comparisons can be predicated between classes, both of which are so meagerly provided for as the country brethren.

A writer in a still earlier number, that of February 23d ult., gave some strange—probably before unsuspected—facts and statistics, demonstrating that colleges, always under clerical control and influence, had, from their very origin, treated the medical calling with a studied neglect, contempt, and omission—so palpable, so universal, as not to be accounted for or explained, on the idea of accident or mere coincidence. The physician has borne it all with "that sufferance which is the badge of all our tribe." This writer demonstrated, by a reference to triennial catalogues and other documentary publications of the colleges themselves, that medical men never had either lot or part in the boards of trustees, examining bodies, or as recipients of the higher honors, within their trust. In fact, in eighty members of trustee boards, two only are physicians. And in several of

the colleges, no medical trustee had ever been appointed. Physicians, elevated to the chair of state *ex officio*, alone formed the exception of medical men in this connection.

It would seem, from these indications, that the attention, the self respect and the *esprit du corps* of our body have begun to be aroused. The time is approaching when medical men will examine and decide the question whether they are to be treated by the members of a cognate liberal profession as their equals in virtue, intelligence, and aim; whether there shall be that mutual support of callings, neither of which surely, in these latter days of reforms and innovations, can be in imminent danger of being injured by too profuse demonstrations of general respect and consideration.

Which party, in the present antagonistic position, is responsible for the earliest aggression it is not needful to decide, nor which party can least afford this internecine war against each other's standing and interest. Our medical brethren in the interior, who have long borne in silence the officious interference of the clergy in determining a professional preference "amongst their people," in injudicious ministrations in the sick chamber, irrespective of the judgment or wishes of the physician attending, and in partisan efforts towards introducing "a member of our society," into circles of practice already overcrowded, can determine this question.

In the same category with the want of respect for the medical body, and doubtless dependent on the same state of feelings, is the curious propensity on the part of the clergy, always manifested, to patronize, recommend, and puff all kinds of empirical measures and men. Dr. Holmes, in his amusing "Delusions of Homœopathy," gives many grotesque illustrations of this singular proclivity of ministers to run after wild humbugs and ridiculous cure-alls, at far back as Perkin's Tractors, certified to by half the reverends of New England, who were seduced by the gift of a half cent's worth of brass and pewter; and the same spirit is continued down to this morning's papers, in which the Rev. Mr. Williamson and the Rev. Mr. Drew certify to some asthmatic elixir, under their own sign manual! It is well understood that the venders of quack medicines are ready to give an extra price for a certificate from a reverend, especially if it closes with a due quantity of devout expressions of gratitude, equally distributed to the Author of Good and the inventor of the patent medicine!

Now why do the clergy figure so prominently in the annals of quackery, even of the grossest kind? Is it because they would willingly see the educated practitioner driven into the pursuits of trade and agriculture? Or is it, that being a class of men peculiarly ignorant of the world and its ways, they are more easily misled and gammoned? Or is it because, having been taught at college a smattering of the *ologies*, they have the vanity to presume that they can make a short cut, 'a royal road,' to what proves so long, so arduous, so uncertain a goal, as the educated physician acknowledges his ultimatum to be, after life-long struggles and honest devotion to the truth.

The prominent defect of men, like the clergy, who have none, or only an elementary smattering in the science of medicine is this—that they insist on making a full, glorious, growing summer, of a single, solitary swallow, which they have seen, or *think they have seen*, or, at least, heard of; they are unable to comprehend that a *post hoc* is not necessarily a *propter hoc*, that a *sequence* may not be a *consequence*—or, to use the

well-known English saying respecting that class of logicians who couple things together as *cause and effect* simply because they happen about the same date, they always regard Tenterden steeple to be the undoubted cause of Godwin sands! If, perchance, they should see a patient recover after a 'great medicine' of the Pottawatamies had performed his filthy orgies over him, they would never have the intrusion of one doubt that the miraculous cure resulted from the 'means being blessed.'

These shallow logicians never dream that the natural, spontaneous termination of nineteen-twentieths of all sickness is in recovery, and not death—that, whether treated or mal-treated, or left to the resources of the constitution, the patient may be expected to live; how much unnecessary suffering, delay and permanent mischief to the sufferer, from the omission of proper, or the administration of noxious means, being entirely a different question. When a person who is more or less sick, makes an escape, after any of the varieties of empiricism, with his life, these sagacious philosophers are ready to throw up their caps and cry *Eureka!* Many a parson who finds his child get well, somewhere about the epoch when some new quackery has been applied, goes cackling about the parish, as if the philosopher's stone had been discovered. His intelligent parishioners—finding their pastor adopting that motto so universal, as well to deserve to be emblazoned as part of the clerical arms, '*credo quia impossibile est*'—begin to ask the question whether he builds his faith in the doctrines and truths of religion, which they pay him for teaching to themselves and their families, on the same psychological processes, as those on which he hangs his medical belief. The natural conclusion is, that a man who is ready to hazard the lives of his household on practices and practitioners, in respect to whose value or safety he had less evidence than a prudent man would require of the itinerant tinker who presents himself to mend the brass kettle, is not a safe guide in matters either temporal or spiritual. Is this any explanation of the recent fact, that more than one of the clergymen of this city, who a few years since identified themselves with the now all but defunct vagaries of Hahneman, have had leave to retire to other 'fields' *on account of health*; or is it that the same want of good common sense, which embracing this humbug would indicate, is merely an '*ex pede Herculem*' proof of enormous weakness and gullibility in other points of their intellectual constitution?

This train of thought has been suggested by reading an article in the last Christian Examiner, presumptively the production of some member of the clerical or pedagogic profession, on the water cure, as it is called. This guess is hazarded under no knowledge of its paternity, but for the reason that there is a solemn owliness in its *ex cathedra* annunciation of common places about pathology—a smattering of medical ideas, such as could only be obtained from some school-girl's compend of "Physiology made Easy," or "The House I Live in"—mixed with eulogistic, self-complacent commendations, common in circulars and advertisements of "Water-Cure Establishments."

Of course we have no idea of attempting a formal argument in reply to such an article, from such a source, and in such a vehicle. Nothing is more absurd than the attempt to argue down a delusion, even with an antagonist whose preliminary acquaintance with the subject matter renders it practicable to adapt reasoning to his comprehension. The endeavor to

reason on a topic of medicine with a writer like this—one who manifestly is not guilty of claiming the elementary rudiments, the very A B C of acquaintance—would be as ridiculous as it would be to labor with brother Himes, or Silas Lamson, on the intricacies of exegesis, or the philological refinements of the Coptic or Sanscrit dialects, with the pious end of convincing them that they are utterly ignorant of interpretation and prophecy. It would in either case be very easy to furnish the conclusive proofs, but to furnish the recipient understanding, *hic labor, hoc opus est!*

Some of the ridiculous points of this aquatic evangel—its analogies to various other forms of moonshine and fraud—might perhaps be made available to some innocents of both genders, who have not read enough in the earliest books of medicine to be able to comprehend the absurdities of them in a medical point of view.

Sir Gilbert Blane long ago made the remark, doubtless verified in every intelligent person's observation, that whenever a professed curer of disease, regular or empiric, undertook to set up the claim that he lost very few or no patients, it may be safely affirmed that either he was trusted with no serious cases, or would be found to lie—under a great mistake. Our cold water lacquey, who pretends to give the returns of one of these aquatic caravanseras, will find that his vaunted success is "decidedly and individually" surpassed by the "semi-occasional" announcements of Dr. Peters, Dr. Dow, and other worthies, whose cures are made "without absence from business and with no mercury," in the daily "penny medical journals." These "bastard and unlineal sons" of "Slapslapius," in their pathetic Jeremiads to the afflicted "to beware of the advertising quack across the street," report more thousands cured without being killed, than there are hundreds under the "cautious and intelligent practitioner" [!/] whose glories he celebrates, and whose veritable history and claims to confidence are foreshadowed in an official certificate of an association of his countrymen at Philadelphia, published in this Journal some months since.

Our friend Aquarius—for so bright a constellation of medical science deserves a no less personification—has apparently got hold of some crude ideas of the ancient humoral pathology, and gravely announces the theory of the water cure to consist in washing out a goodly portion of the patient, and making him over anew. Hercules, when he turned the river through the Augean stable, was the first water-cure practitioner.

Hamlet's grave-digger had only discovered, by his professional experience, that "water is a sore destroyer of your whoreson dead bodies." These modern comicalities have carried their prototype's observation still farther, and finds that its virtues in decomposing the living carcass are no less wonderful. A man is washed out and made over, our learned author avers, more in six weeks under the water cure, than in three years of the old and natural way! "It is a remarkable, but perfectly-well-authenticated fact," he says, "that drugs which have lain dormant in the system sometimes for years, make their appearance, clearly perceptible to the senses, and are expelled from the body during these cures." A most remarkable fact truly! the only parallel to which in history, as far as we have read, is the remarkable congelation of sound in the trumpet of a celebrated German practitioner—Mein Herr Baron v. Munchausen—which being subjected to the sweating processes, resulting from setting it up in the chimney corner, gave forth most melodious music; charges, marches

retreats, and triumphal blasts, were *made over* in the best conceivable style! *

Any intelligent reader of the *Christian Examiner*, who would see how insignificant a part these humoral notions play in modern pathology, can consult the work of Chapman on Therapeutics, or the notes by Dr. Beck to Murray's *Materia Medica* for the other side, or any other respectable treatise in any regular physician's library. After so doing, he will arrive at the conclusion that any brain which can accept of the crudities of hydropathy, must have fully partaken of the watery imbibitions and replacements of its owner.

Were this miserable cold-water humbug—this poor quackery of using water “as his stimulant, his tonic, his purgative, his counter-irritant, &c.,” applied as the seventh son or other empirics apply their panaceas to the worn-out, nervous, hypochondriacal, hysterical cases, ever in search of something new, or were it like homœopathy or Broussaism, only guilty of murder by omission, its responsibility would be comparatively trifling. The fatal effects of the use of cold water in acute visceral inflammations, and indeed in serious diseases generally, are not passing without note and record by the profession; but as in Thomsonism, the aggregate of terrible results may sometime be presented to the utter confusion of pretenders, if they have shame or conscience left. The profession have found, long since, that these delusions die quickest, if let alone—which has prevented the publication of certain cases of hydropathic homicide, cruel enough to make the ears of those who hear tingle.

Were only the enervated, exhausted, transcendental victims of excesses and indolence, prostrated by pernicious personal practices, the only subjects sent to these cold water seminaries, no great harm might result. Whether the treatment of these cases of *goteness* (as they are denominated by a celebrated panaceist) is “Dr. Banning's Laze,” the cold water cure, or “Brandreth's Constitution Pills,” is “much of a muchness.” There must be a certain portion of the community, who have a natural tendency to quackery; it always has been so and will, no doubt always continue to be so. It fortunately happens that this class is ever much smaller than it seems to be. Watch the sisters, male and female, who now spend their time in running after this hydropathic mummery. Last year they were

* A friend at our elbow suggests that the notion of drugs working out through the skin after long *remora* in the system, was deduced in this vicinity from the case of the Rev. J——, once a respectable minister but who abandoned himself to drink and opium eating. He was induced, by some of the cold water sages, to try the effect of their panacea. When he was under a full head of the sweating and steaming process, sure enough, the pent up vapors gave forth a most unsavory odor of laudanum! With their usual cautious generalization, and the modest self-reliance which always marks the inductive philosopher, the old women of both sexes who watched the phenomena, at once held up their hands in amazement at the miraculous fact—more wonderful than the liquefaction of the blood of St. Januarius—that the long locked up poison was compelled to desert its victim! Poor J——! the reform was of short duration. The Lunatic Hospital at Worcester soon received him, and the amusing explanation came out, that a small vial of the precious tincture, which he had concealed about his person to comfort him in passing through Jordan—for his dread of the element had long been perfectly *hydrophobic*—had been accidentally fractured, and its perfume thus shed abroad!

“You may break, you may ruin the vase if you will,
But the scent of the roses will hang round it still.”

equally full of transcendentalism, the year before of homoeopathy, the years before of animal magnetism, Grahamism, phrenology. Next year they will be Fourierites, communists, George' Sandists, &c. The farce will be the same, only the performers will, like Othello, be a little more "declined into the vale of years"—*anglice*, old maidendom. Like the supernumeraries of a strolling theatre, who first appear as a procession of holy monks, next march as a band of Roman soldiers, then as a chorus of Alpine peasants, until the youthful spectator is lost in amazement at the legion who are hired for his entertainment, when an unlucky pair of bow-legs, or a portentous Bardolphian nasal promontory, lets the cat out of the bag. He finds, and is a little provoked to know that all the varieties he has seen are only the same performers, doubling their parts, and coming round again after a due circulation, like the moving figures, which walk out on one side of the face of a Dutch clock, when it chimes, and in at the other.

One word before we part, to our friends of the Christian Examiner—a most respectable periodical of its kind, well supported by medical as well as by other educated gentlemen. They must be intelligent enough to realize that the breach between the educated professions of medicine and theology is wide enough already, without any effort on the part of either to make the estrangement more complete. Suppose, to illustrate the feelings with which a regular physician may be supposed to cast his eye over the pages now under remark—that an educated clergyman should take up a number of this Medical Journal, and find a labored attempt to show by such plausible pretences and specious assertions, as may easily be applied to any topic whether true or absurd, that the researches of all divines, philologists, and scholars, heretofore, have been superceded by the mesmeric revelations of "Andrew Jackson Davis, the Poughkeepsie seer;" that the life-long labors of Channing, Ware, Norton, and all the galaxy of good and great men they have habituated themselves to reverence, as the guides of their lives, have been eclipsed and rendered nugatory, by the new discoveries and new interpretations, "right out of their own heads," of Ascension Miller, Brother Lamson, or Elder Knapp; that the theology of Cambridge, Andover, and Princeton, is all rank nonsense since the revelations in Joe Smith's "golden plates of Mormon." He would not more quickly pitch these pages behind his back log with loathing and disgust, than would the physician, when he sees the sages of his profession, dead and living, *overlaid* and rejected in favor of the poor vagaries of an ignorant German peasant, and the humbugs of Mr. Gully (whose name is of no inapt significance), or any other of the more educated but less sagacious apostles of this aquatic gospel.

We would venture to remind your theological confreres, Mr. Editor, of the old and homely adage, *ne sutor, &c.* They may take it for granted, that it is neither their "mission" or vocation—still less those of their hydrostatic correspondent, *tantas componere lites*, as must always, it is hoped, exist between the science of medicine, and the humbuggery of panaceas—between the regular physicians and the empirical pretender. They should also not forget, that there are various little theological differences still pending, commencing with the relations of Adam's original transgression, and continued uninterruptedly down to Dr. Bushnell's sermon before the divinity class of the University, last Sunday night. Better elaborate and discuss these topics, on which they have some education and knowledge before

proceeding to those in regard to which it is no discredit to any clerical gentleman or schoolmaster to say that he knows nothing.

When all the controversies of sects are settled, then they will be excusable if they venture on the quixotic errand of aiding and relieving the distressed sisters, male and female, who are ever so anxious that people should be born and die in some approved method which can be learned without toil. Our respectful counsel, then, to our brethren of the Christian Examiner would be, to stick close to their christian labors and investigations, leaving medicine to its legitimate organs, and cold water to the engines, which will, no doubt, continue a short time longer to pump forth

“ Their weak, everlasting, washy flood.”

Cold water, hot water, ice water, yea steam of water, are all very good, useful and comfortable appliances, directed by wise and experienced heads, and assisted by proper therapeutic and dietetic means; but that cold water can be a panacea—a cure-all for all diseases, like Brandreth's pills and Gordak's drops—can only be expected when Yankee ingenuity shall have invented that augur which shall bore a square, a round, or triangular hole, at will.

In taking our leave of the writer of this “first rate notice” of one of the many cold-water hotels with which our vicinity is becoming *inundated*—soon, we doubt not, to be left high and dry, by that tidal reflux incident to shallow flats, and to expose a mass of corruption to the noon-day sun of common sense and judgement—we would commend to his consideration the texts of St. Paul and Solomon (his reading may perhaps recall to him the author and the phraseology,) about “being wise in one's own conceit,” and attending to one's own business. We hope we have done the honorable profession of the clergy no wrong in presuming the writer to belong to it, or to be a “schoolmaster abroad”—very far off from home indeed. We opine the latter to be his vocation, from the peculiarly self-satisfied, dogmatic air which men accustomed to throw out their opinions before children, without hazard of reputation, naturally assume. If, on the other hand, he is a clergyman, it is most probably of some of the new fangled transcendental varieties. His hortations about the religious and moral duty of swallowing down this kind of wet-sheet baptism, are announced in that tone of holy snuffing, with which the devout Musselman peddles his wares, in the streets of Constantinople; “In the name of the prophet—*figs!*” His mixture of quackery and cant reminds us strongly of the directions in the envelope of a bottle of “Dr. ———'s accoustic oil for the certain cure of deafness,” viz., to use the oil daily, to abstain from labor on the Sabbath, and bath the privates in cold water! In some of our amphibious prophet's school books, if that be the respectable vocation from which he has stepped aside for less respectable labor, he will find some verses, the hydraulic imagery of which we may commend to his fructification, ending thus—

“ *Drink deep, or taste not, at the Pierian spring,
For shallow draughts intoxicate the brain,
But drinking largely sobers us again.*”

Anthropo-toxicologia—Cases, with Remarks. Read before the Alabama Medical Society, April 3d, 1848. By C. E. LAVENDER, M. D., of Selma, Alabama.

Not being able to find, in the works of Nosologists, a name which conveys what I conceive to be the cause and pathological nature of the following cases, I am forced to adopt, or rather to coin from Greek a word somewhat in accordance with my views. If I rightly apprehend the nature of these cases, my limited reading does not enable me to remember any recorded cases similar to them. Nor have I been able to find any allusion to a pathological condition, which I have supposed to exist in these cases. I make these remarks at the risk of being written down a very limited reader. I incur the risk, however, with the hope of being enlightened on the subject; and for the purpose of excusing myself for the apparent pedantry of employing, in this advanced age, a new term in medicine.

The term *Anthropo-toxicologia*, it will be seen, is a Greek derivative, from *Anthropos*, man, and *toxicon*, poison, and it is intended to convey an idea of that form of *poison* generated in, or secreted from, one healthy person capable of producing disease in another human being subject to its influence.

That the human body in a state of disease is capable of sending forth a contagious or infectious poison, is familiar to every one. That the natural and normal secretions of certain animals are poisonous, and will, when received in the human system, produce disease and death, is equally true. But that the secretions or exhalations from some human beings in health, are so virulent and noxious as to cause disease in other healthy persons, is a position that will not readily be conceded, and must, therefore, be examined. For the purpose of throwing light upon this subject, I offer the following cases, which I think will be found interesting, whatever theory may be employed in explaining them.

Case I.—Mrs. E. K., æt. 25, good constitution, mixed temperament, black hair and eyes, rosy cheeks, rather full habit, cheerful temper, uninterrupted health, was married to P. K., early in 1845. Soon became pregnant and began to decline; became pale and hydropic; in a few months abortion followed. Bad health continued; some improvement, and in the fall of 1845, again became *enclente*. Temperament now leucophlegmatic. Various diuretics and tonics used with but little benefit.

Feb. 11th, 1846. Delivered of a still-born child by a premature birth. Nothing extraordinary attended or followed parturition, save the fact that no red blood followed the cutting of the cord or the removal of the placenta. Quite exhausted but cheerful. *R.* Nutritive diet, elder wine, laxata, chalybeates.

15th. Found her cheerful, complaining of little pain, but much oppression, and at times drowsiness; but little derangement of secretions; pulse 110, feeble, compressible and undulating; sighs often and turns from side to side; deadly paleness and slight swelling about the eyes; tongue clean, but pale and colorless; little appetite, no nausea; roaring and uneasy feeling in the head, but no pain; light somewhat unpleasant to the eyes; *light and all white objects appear yellow; indistinctness of vision.* *R.* Wine, veg. bitters, tr. muriat. ferri, B. mass, pul. dover.

16th. Pulse more frequent, compressible and intermitting; more oppression, vision indistinct; *light looks red, white curtains appear red, dark objects yellow, or dull red*; pupils dilated. Complains of no pain, but is more restless and desires to be turned oftener. *R.* Op. camph. wine, min. acids, light mercurials and counter-irritants.

17th. Has sunk rapidly since yesterday. Nothing that she has taken has had any visible effect. *Light as red as scarlet*; some wandering of intellect; breathing more laborious. Sunk gradually and without complaint till she expired.

Case II.—Mrs. S. K., second wife of this same P. K., aged 25, sang. nerv. temperament, good health, sound constitution; accustomed to manual labor; married in July, 1846, became pregnant and began to decline. Took sundry patent nostrums, which caused further prostration. In about eight months hydropic symptoms supervened.

April 10th. Delivered of a living male child. No attendant circumstances worthy of remark. Directed *magnesia*, nourishing diet, etc.

17th. Found her debilitated and oppressed; no acute pain, but dull aching in the head; hydropic symptoms; appetite moderate; secretions scanty, otherwise normal; pulse 120, small and deep seated; light unpleasant to the eyes; some darkness and obscurity of vision.

R. Ars. sol. chalybeates, blue mass, wine, nourishing diet.

18th. Frequent and distressing attacks of dyspnoea, approaching syncope; otherwise as before. *R.* pill. assafet. every six hours, alternate with blue pill; wine occasionally.

19th. Attacks of dyspnoea frequent and distressing. Becomes cold occasionally, with feeble pulse, but no reaction; no action on the bowels; lochial discharge freer; roaring in ears and optic illusions; *can see but one half of an object, and that looks green*; light somewhat painful to the eye: stupid and somewhat comatose. *R.* Nit. acid, b. mass, quin., morph., wine, arrow root, sac, etc.

20th. No improvement in any of the symptoms. Can see but half of a person's face, *which looks green, with red spots*; pulse, as before, 120, feeble, intermitting. *R.* Camph., t. op., t. stram., b. mass, wine; dry mustard to spine, blister to neck.

21st. No improvement; rather comatose; no complaint of head; *light and white objects red*; pulse 120: complains of the mouth. *R.* t. stram. 6 gla., ter die, wine, panada.

22d. But little alteration; rests well. Continued treatment.

23d, A. M. Healthy bilious stool; more in her senses; rests well. At 4 P. M., an exceedingly offensive watery purging came on, which caused great prostration; moderated in a few hours by the use of sac. sat. ap. and astgt. enemata. *R.* Sinapisms, burnt brandy, camph., ammonia, sac. sat., tr. opi.

24th. Purging moderated, but all the symptoms worse. Comatose, with optic illusions. Secretions from the skin, etc., so offensive as to require purifiers; pulse 120, thread-like; cold extremities; apparently moribund. *R.* Quin. gra 20; tr. opi, gta 20; to be repeated in six hours.

25th. Has had several cold spells, with threatened spasms; smell not so offensive, still necessary to keep something burning in the room; blisters on legs and back filled with yellow water. *R.* Quin. gr. 10, g. camph. gr. 2, morph. gr. $\frac{1}{2}$, every 6 hours.

26th. Symptoms as before; no improvement. Continue treatment.

27th. Rests quietly; some light delirium; offensive smell measurably removed; takes panada, etc. Continue treatment.

28th. More in her senses; still cadaverous look and optic illusions; petechiæ and blisters continue. Complains of quinine affecting her head. No action on bowels for 48 hours. R. Nit. acid, A. M., magnesia, P. M., morph. at night.

29th. Found her narcotized. Cr. tr. and sulph. had been given last night, without my knowledge, which brought on excessive purging; a large amount of opiates had been given to check it. The patient gradually sunk and died next morning.

Case III.—Mrs. W. This case, in its rise, progress, diagnostic symptoms and result, is entirely similar to the foregoing.

Remarks.—the toxicological symptoms in these cases are the constant and gradual emaciation and waste of vitality, without any apparent fixed disease; the optic illusions, especially the "fact of *light appearing scarlet, and white red*;" the coincidence of the symptoms under similar circumstances: and the fatal termination.

The anthropological facts are these: P. K., the husband of the two women whose cases are detailed (and the remarks will equally apply to D. W., the husband of the third,) is a man whose cutaneous secretions, especially under excitement, are known to be exceedingly offensive and disgusting. "Essentially an unclean animal, all the civet of the apothecary, mixed with the perfumes of Araby the blessed, cannot sweeten him." Is it not possible—nay, is it not probable, that the inhalation of these gaseous secretions or the absorption of others, from this living laboratory of malaria, may have produced deleterious impressions on those constantly subjected to their influence, causing a specific and fatal train of morbid associations?

These two women were in the prime of life, in robust health, of good constitution and of active, healthful habits. So soon as they came in contact with this man, they began to exhibit the effects of morbid causes. They both became leucophlegmatic, and constantly and steadily to decline. The same optic illusions, dimness of vision and perversion of colors, marked the progress of both cases to a fatal termination.

The matter of contagion is no more cognizable to our senses than malaria. Infectious disease is, however, usually attended by a certain very sensible fœtor. Persons whose bodies, in a state of health, are capable of elaborating infection, as far as my observation extends, are distinguished by the strong and peculiarly offensive character of their pulmonary and cutaneous exhalations. Although this may not always be the case, yet so signally is it true in the cases before us, that I have heard sensible men say that, in their opinion, it would cause disease in any person who would room with them. I, therefore, set this moribific agent down in the catalogue of animal poisons, as human infection *sui generis*. What is nature, its essence—from what part of the body derived, and upon what tissue it first makes its attack, are, at present, matters of conjecture. Whether all persons are obnoxious to this poison, or whether there is a peculiarity in some, rendering them more susceptible of its action than others, time and observation must decide. In the cases above noted, the noxious cause evinced its power by depressing the vital energies, impoverishing the vital fluid, and deranging

the sensorium. There are, doubtless, instances in which the infection, not being sufficiently concentrated or virulent to cause fatal consequences, makes known its existence in the continued bad health and low spirits of its victim. And this, it may be, is the secret why so many hysterical cases are so difficult to be controlled, and why, in such cases, the experience of our profession finds it profitable to prescribe temporary *absque marito*.

I have brought these cases to the notice of the Society, in order to call attention to this peculiarity in the human structure, and to this form of disease. When the first case presented itself to me, I looked upon it as a case of hydropic affection with *ramollissement* of the brain. When the next case occurred, with all the peculiarities of the first, I very naturally suspected a similarity of cause. No other known cause presenting itself, I have deemed the one name sufficient to explain the phenomena. The third case, similar in all respects, both as regards cause and disease, strengthened my conviction. Nor is this conclusion, in my judgement, either rash or unreasonable. Personal cleanliness is conducive to health—the reverse, predisposes to disease. Healthy persons crowded together in a tight room, or in the hold of a ship, will suffer and contract disease from exposure to their own secretions and exhalations. Writers on hygiene, say it is hurtful to the health of the very young to sleep with the very old. It is not, therefore, more true that “evil communications corrupt good manners,” than it is that evil bodily associations impair the health and superinduce disease.

REMARKS.—The above cases are both curious and interesting, and we are disposed to think Dr. Lavender correct in ascribing the gradual decline and ultimate death of two of his cases, to the fetid and filthy exhalations arising from the body of their husband. The subject deserves consideration, and we hope the publication of these cases will excite the attention of physicians and elicit some further remarks on this curious question.

Whilst on this subject, it may not be out of place to allude to a singular prejudice which exists in Havana among those born of Spanish and native parents. Into the private and public hospitals of that city, nothing can induce a native of that Island to enter as a patient, if it is known that one or more cases of Phthisis are quartered in the institution; yet, at the same time, they neither fear the yellow fever or any other form of febrile disease, although liable to contract such diseases. They argue that the exhalations, secretions, etc., etc., from the consumptive, not only predisposes those confined in the same room to the same affection, but also deteriorates their general health, impairs the tone and vigor of their constitutions, and thus prevents their speedy convalescence from other diseases. Popular prejudice sometimes has truth for its foundation, and such may be the case in this instance.

We regret that no post-mortem examination was made in these cases, as, without this test, they, must be unsatisfactory and incomplete.—*N. Orleans Med. & Surg. Journal.*

Bellevue Hospital.—Nitrate of Potash in Large Doses in Acute and Chronic Rheumatism. By C. R. GILMAN, M. D., Visiting Physician to the Hospital at Bellevue.

Although the fact that nitrate of potash can be taken with entire safety, in doses much larger than those to which it is restricted in the text books, was long ago established by direct and careful experiment, and although the utility of such doses in the treatment of inflammatory diseases was at a period as early confidently asserted, by those who had made trial of the remedy, yet when it was, a few years ago, re-introduced by M. Gendrin and M. Solon, with particular reference to its powers over acute rheumatism, it was received by the majority of the profession as a new remedy, and in England and this country very many were prompt in denouncing it as hazardous in the extreme. Johnson, in the *Med. Chir. Review*, says: "M. Desportes and Martin Solon are guilty of egregious blundering when they fancy that rheumatism may be most quickly and effectually cured by 'monstre' doses of nitre." Denounced in such spirit the practice has never been generally adopted.

Having lately been successful with it in a few cases in private practice, I was led to make trials of it at Bellevue. Before communicating to the profession the results of these trials, it will, perhaps, be well to say a word or two on the history of these large doses of nitre. Dr. William Alexander, about 1766, undertook a variety of experiments on nitre, which he subsequently published. From the second edition of his "*Experimental Essays*," published in 1770, for a copy of which I am indebted to my learned colleague, Dr. John B. Beck, I find that he took (by way of experiment) so much as an ounce and a half of nitre, dissolved in a quart of water, in twenty four hours, without marked uneasiness. But Alexander found that although he was able to drink, in the course of twenty-four hours, a quart of water in which twelve drachms of nitre had been dissolved, yet when he attempted to take doses of the salt, fresh dissolved, he felt great inconvenience from drachm doses; he took eight, (each dissolved in four ounces of water.) but when he tried drachm and a half doses he was able to take but three. From these experiments he inferred that "much larger quantities of the salt may be taken than were before given, and that the power of the remedy is much greater when each dose was taken immediately after it was dissolved than when kept for hours in a state of solution." Alexander further states that after he had thus experimented on himself, he gave the remedy in several inflammatory cases with advantage, but on this part of the subject he entered into no details.

Such were the results of the carefully performed and candidly detailed experiments of Alexander. While he was thus experimenting on the effects of large doses of nitre in the healthy system, Dr. Richard Brocklesby was trying these doses in a variety of inflammatory diseases. His results were made public before those of Alexander; Brocklesby's observations having been published in 1764.

This accumulation of evidence seems to have made little impression on the medical mind; a few vague allusions to the cases of Brocklesby and the experiments of Alexander are scattered through the works on *Materia Medica*, but the writers still adhere to the old doses. About ten years ago M. Gendrin, of La Pitie, revived the practice of Brocklesby; the results of

his trials, and of those of M. Martin Solon, were in 1841 communicated to the Academie de Medicine, Paris, and subsequently to the English public by Dr. H. Bennet, in two papers published in the London Lancet, 1844. Even at this latter date, however, the danger of fatal inflammation of the kidney or serious disease of the stomach, was strongly insisted on by some of the most enlightened of the London physicians.

With these remarks I submit the following cases:

Case I.—A. B., female, aged 48; had been under treatment for upwards of six months; has taken *vin. sem. colchici*, *Tr. actea racemosa*, and various other remedies, without marked effect. The nitrate was given in 3ss. doses thrice a day for two days, then 3i was given, and the patient began to improve, the dose was continued nearly three weeks, when she was discharged cured.

Case II.—C. D., girl, aged 19; has suffered for months from sub-acute rheumatism. The remedies given to No. 1 were faithfully tried, and also *Hyd. Potass.* with *Extr. Hyosiam.* The nitrate was used in 3i doses, and produced similar results as in No. 1.

Case III.—E. F., man, aged 40, admitted with sub-acute rheumatism; treated with *colchicum*, *gulac*, &c. The nitrate was given in two drachm doses. He was entirely relieved when he had taken but two ounces.

It would be easy to multiply cases but they would generally be but duplications of the above.* It will be observed that most of these cases were sub-acute or chronic, this is the only respect in which they differ from the cases of Gendrin, Solon, &c. In all the cases the dose was dissolved in about half a pint of some bland fluid, it was usually given immediately after being dissolved. As to the sensible effects, there was but little variety—in a few cases, uneasiness at stomach was complained of, immediately on swallowing the medicine, and one patient had vomiting. In most of the cases free diuresis was observed, and in one or two profuse diaphoresis, while in several the remedy produced no other sensible effects than relief of the pain. The pulse was singularly affected. It often fell rapidly immediately on the dose being swallowed.

My intelligent friend, Dr. Lawrence, Assistant Physician, gave me the following note of his observations, in one case:

Pulse before the dose was swallowed, 92; in five minutes it fell to 58, and in ten to 64; after this it gradually rose to the former standard. As a permanent effect, the pulse, when the remedy was acting favorably, fell 20 or 30 beats, soon losing all the rapidity characteristic of the disease. This immediate effect of the remedy on the pulse was noted by Alexander.—*N. Y. Annalist.*

Another Victim to Quackery.—In one of the Western Medical Journals, Dr. Meeker, of Laporte, Indiana, details a case of cancer or scirrhus tumor in the breast, to which a "cancer doctor" first applied a blister and removed the cuticle, and then a plaster spread over with a fine white powder. The plaster occasioned great pain, but was continued on the breast eleven hours. After it had been on only two hours, the patient began to

* The remedy has been given in about twelve cases; in all but one with marked benefit.

feel a metallic taste in the mouth, nausea, griping pains in the stomach and bowels; and soon after vomiting with spasmodic action of the muscles. These symptoms continued until the plaster was removed, when a dose of laudanum was given, and a physician sent for. He came in a few hours, and found the patient as follows, viz: "Pulse 126, violent spasms, constriction of the muscles of the pharynx, burning sensation in the œsophagus, nausea and vomiting, cold extremities." &c. She lingered until the seventh day, and died, notwithstanding the most judicious and faithful attention. Dr. Meeker was called in consultation, and finding the "cancer doctor" in the house, induced him to state the composition of the powder; which was *corrosive sublimate*, in quantity nearly 100 grains. He alledged that "he had applied it to a great number of cancers, but never knew it to produce such an effect before."

After the fatal result, the old quack explained it all, by saying "that the roots of the cancer *reached the heart*, and that the *medicine*, in following them out, produced death." Some, however, not seeming satisfied with this explanation, he secured his own safety by decamping with twenty dollars, which he received, in part pay, for the murder. The rapidity with which the poison was absorbed in this case is worthy of notice.—*Annalist*.

On Chinoidine. By J. S. UNZICKER, M. D., of Cincinnati.—Chinoidine has been for several years past extensively used in Germany, but up to this time has not been generally known in this country.

It is a resinous substance, and was first discovered and separated from the mother liquor of sulph. quinine, by Sertuerner, a chemist. There are two kinds in commerce, the pure and impure. The genuine is hard, and has a smooth, glossy break, like the hepatic aloes, which it resembles in color. It is transported in oblong flat lumps weighing about one pound each, wrapped in wax paper; will dissolve perfectly in dilute sulphuric acid, alcohol and ether, forming a clear tincture of a brown color.

It is insoluble in cold, but scantily soluble in warm water, imparting to the latter a strongly bitter taste.

The adulterated comes in jars, and is soft; will only partly dissolve in alcohol and ether, not forming a clear tincture like the other.

Chinoidine has been analyzed by a number of chemists, but as yet no satisfactory results obtained. It contains, according to Liebig, identically the same composition as quinine, but differs only in form, one being crystalline, the other not, and therefore he terms it the amorphous quinine. Chemical investigations, as far as they have extended, have thrown an interesting light upon the testimonies borne to the efficacy of chinoidine in the treatment of intermittent fevers; and there is no doubt in my mind, that the amorphous, if prescribed in its pure state, like the crystalline quinia, will produce the same effect on the animal organism, only that the effects of the former are more lasting.

I have used chinoidine for the last three years more extensively than quinine, and on an average with better success, especially in cases of long standing.

In a number of obstinate cases of long standing, who came here from the Wabash country, quinine was first given without any effect. I then

gave the chinoidine, which not only checked the paroxysms, but no relapse followed afterwards.

From the experience which I had during the above time with this remedy, I think the return of the fever was one third less than when I used the quinine. It is particularly suited in cases where the digestive organs are not much debilitated. My mode of giving it is thus:—*R.* Chinoidine, gr. xij.; rad. ipecac., gr. j.; morph. acet., gr. 1-4. Mix, and make into six pills, to be given in two doses, two hours previous to the chills. Some German physicians prefer to give the chinoidine in combination with cremor tartar and cloves, in the form of pills.

This I found would have the same effect as that of many grains of quinine with the same combination. After the chills were stopped, I would then give a teaspoonful of the tincture (3j. to ʒj. of alcohol) from two to three times daily in some claret wine, for several days afterwards.

It has been said by some, that the effects of chinoidine depended on the quantity of chinine and cinchonine it contained. This is an error; for suppose it did contain some chinine and cinchonine, how much could there be in twelve grains of chinoidine? Surely not half a grain of each! and would they have produced the effect above described? Certainly not. Many, as well as myself, have labored under this mistake, until they have learned to distinguish between the pure and impure article, for if it is pure the results will be alike.

Chinoidine will undoubtedly, in time, become the great remedy of practitioners in the West; for when we consider the high price of quinine, \$3 per ounce, and chinoidine at 40 cents per ounce, and besides a more effectual remedy than the former, no doubt is left of its adoption into general use.—*Western Lancet.*

On the Hygienic Influence of Cutting the Hair.—Medical men are occasionally asked whether it is proper to cut the patient's hair; whether, in fact, this operation has any influence upon the health. M. Fredericque resolves the question by giving the following illustration:—

A little girl, aged three, of good health in general, had her hair grown excessively long in the course of a few months. She was a beautiful child, but had latterly wasted without any apparent cause, becoming dull and apathetic, losing her appetite and strength without any organic lesion being discernible. There was an anæmic bruit in the carotid. She was placed upon a tonic regimen, with chalybeates, but without deriving material benefit, until her hair was cut short, at the suggestion of a friend, from which time she rapidly gained strength.

It would appear from this case that the economy had suffered a loss in the expenditure of blood necessary for the secretion of the abundant crop of hair. M. Fredericque considers that it is the formation of the coloring matter which chiefly exhausts the blood, as this is formed at the expense of the hæmatosine.—*Annales de Societe d'Emulation; Revue Medico-Chirurgicale.*

EDITORIAL DEPARTMENT.

Annual Report of the Superintendents of the Poor of Erie Co.—From the official report of the superintendents of the poor of Erie County, as published in the Buffalo Commercial Advertiser, we derive the following statistics for the year ending Oct., 1848:—

Whole number committed to the Erie County Poor House from Oct. 1, 1847, to Oct. 1, 1848,.....	822
On hand Oct. 1, 1847,.....	162

Whole number relieved,.....	984
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Of this number, 736 were paupers; 75 vagrants, and 11 lunatics. 189 children were sent to the Asylum, a branch of the Poor House, and contiguous to it. The number of lunatics on hand at the expiration of the year, amounted to 31; number of idiots 9; children 37; vagrants 10. Of the whole number committed during the year, and on hand Oct. 1847, 153 were native citizens, and 881 were foreigners. *Number of deaths at Asylum and Poor House during the year, 159.*

This enormous mortality is a melancholy commentary upon the relief afforded to the sick poor of the county of Erie, at the Poor House. We hope, for the honor of humanity, that a parallel cannot be found in the Poor annals of this country. According to the data above given, the ratio of deaths, in round numbers, is one to every six of the inmates of the Poor House, inclusive of vagrants, lunatics, children, and those paupers who are committed on account of destitution alone, as well as those committed on account of destitution and disease. One out of every six, (and a fraction) of them all, have died during the past year! It is with far other feelings than those of satisfaction that we call the attention of our readers to this statement. As a citizen of Erie County we do so with sorrow and shame. To obviate, however, any imputation of exaggeration in the tone of our remarks, we will cite the mortality in a few hospitals in different parts of the country, statistics of which are at hand.

At the *New Orleans Charity Hospital*, an institution which receives, gratuitously, all the sick who apply for relief, and which is supported by the state of Louisiana, the number admitted during the months of August, September, October and November, 1846, amounted to 3,571. The total of deaths, during the same period, amounted to 314. This makes a ratio

of one to every eleven (and a fraction) of the whole number relieved. During the months given, it is stated in the report, contained in the New Orleans Medical and Surgical Journal, that Epidemic Dysentery was prevalent, and that many of the sick soldiers recently from Mexico were received. It will be observed that the mortality is nearly twice as large at the Erie County Alms House, as at the Charity Hospital at New Orleans!

By the Report of D. M. Reese, M. D., Physician to the *Bellevue Alms House Hospital*, we learn that, from May 25, to Aug, 1847, the whole number of patients received were 8,792. Of these 1,226 were cases of Typhus or ship fever. The number of deaths were 369; or one in every 28 (and a fraction). The mortality of the Erie Co. Alms House is thus nearly four times greater than at the Bellevue Alms House Hospital, near the city of New York! Dr. Reese's report is contained in the New York Journal of Medical and Collateral Sciences.

At the *Quarantine Hospital, Staten Island, N. Y.*, between June 6th and September 6th, 1847, there were received (as we gather from weekly reports published in the New York Annalist) 1,555 patients, the larger proportion being cases of Typhus, or ship fever. Of these 95 died. This makes a ratio of one to every sixteen and a fraction, a mortality almost one third less than at the Erie Co. Alms House!

We quote, lastly, statistics of *Grosse Isle*, where the mortality among the immigrants from ship fever was so great, that the place was characterized by the Montreal immigrant committee, in their report, as "the great charnel-house for victimized humanity." Between May 8th, and June 19th, 1847, the number of patients received at *Grosse Isle* was 2,796, four-fifths being cases of Typhus. The number of deaths was 565, or one in every 4.9 cases. Here the mortality exceeded that at the Erie Co. Alms House, but, as comparison of figures shows, by a small amount.

It is to be borne in mind, in the comparison with the institutions which have been named, that *they* are all devoted exclusively for the reception of the sick, while the Erie Co. Alms House receives vagrants, lunatics, idiots, and those who are merely destitute, but not sick. The report of the superintendent does not state how large a proportion of those committed were affected with disease, but making a very moderate allowance for the number not sick, and the ratio of mortality will exceed that of *Grosse Isle*. A fair comparison of mortality with other institutions like those named, it is obvious, requires that the ratio of deaths to the number actually under medical treatment should be ascertained. Throwing out one third of the whole number admitted (which is probably a small estimation) and the mortality

is not only justly designated enormous, but, it is believed, to be without a parallel in any similar institution in the country.

Among the chief causes of this mortality, it is to be presumed, are the limited accommodations, and the want of appropriate nursing. The Poor House building was erected nearly twenty years ago, when Buffalo, compared with its present size, was but a small village. The only additions made since its erection, are, a small building for orphan children, small, one story wooden buildings for lunatics, and, during the past season, a temporary shanty for cases of Typhus, the cost of which (as stated in the report) was less than \$500. That some idea may be formed of the capacity of the accommodations, in connection with the number of inmates, we give the following statement, which is quoted from a small tract entitled "An Appeal to the Citizens of Buffalo, and of the County of Erie, in behalf of New and More Efficient Means of Medical Relief for the Sick Poor," which was written and published seven years ago:—

"In the main building of the Alms House, are appropriated *two* wards for male, and *four* for female paupers, with a small bed-room in addition to the latter. The dimensions (length and breadth) of the male wards, are 16 by 28 feet. Of the female wards, 15 by 20 feet; of the bed-room 6 by 15 feet.

The two male wards, at this moment, contain *twenty-four* persons.

The four female wards with the bed-room, *thirty-four* persons, four of whom are idiotic.

In addition to these, is a room over the wood-shed, 21 by 25 feet, with a contiguous chamber 12 by 21 feet. This is used as a work-shop and dormitory, and contains sixteen persons; two of whom are colored, and four idiotic.

All these wards fulfil the threefold functions of dormitory, sick ward and keeping room.

A small additional building was erected last autumn, which contains three rooms 17 feet 10 inches square. These are occupied by *twenty* persons; three of whom are lunatics, one coloured, and three distinct families, i. e. men with wives.

This makes the whole number of inmates, at the time of writing, *ninety-four*. This is somewhat less than the average through the winter months. The number is, of course, constantly varying. At times it considerably exceeds *one hundred*.

In order to complete the representation, it is necessary to state, that there occur annually *ten* or *twelve* births in the house; that foundling and orphan infants are frequently brought there; and patients with every species, and in all stages of acute and chronic diseases; also, after accidents and injuries of every description."

Since the time the tract, from which the foregoing extract is taken, was published, the number of inmates has nearly doubled, and the ratio of mortality has increased (comparing the years 1842-3 with 1847-8) from-

one in every twenty, to one in about every six of the inmates. The mortality in 1842-3 was supposed, by the writer, at that time, to be very great, although more than one third less than during the past year.

During the five years of our medical service at the Institution, Typhus fever was once generated in the house, the cases of which were reported for the Boston Med. and Surg. Journal, June, 1841; at another season dysenteric-diarrhoea, of which there were fifty cases during the winter of 1842-3; and erysipelas during another winter. Since our connection with the Institution ceased, we have been informed that fever and erysipelas have been developed at different times, which the medical officers have not hesitated to attribute to concentrated animal exhalations, incident to over crowding. Now, it depends upon the Board of Supervisors to provide proper accommodations for the sick poor maintained at the expense of the county, and the subject has been repeatedly urged upon them. As County Physician, years ago, we made a report to the Board, stating the inadequacy of the accommodations, and that disease was actually generated in consequence; we stated, also, in that report, what we presume is still true, that patients not only died in the general wards surrounded by the sick, but corpses remained there (there being no vacant room for the reception of the dead) until taken away for interment, the moral effect of which upon the sick, and well, is readily conceivable; and, in a word, that, owing to defective accommodations and attendance, many died whose lives might, under more favorable circumstances, have been saved. The Board virtually acknowledged the justice of the claim upon them, on behalf of humanity, by passing a resolution appropriating a blank sum for the erection of suitable hospital buildings; but the sum was suffered to remain a blank! The subject has since been repeatedly urged upon their notice, but with no better success.

The great object with the Board of Supervisors, with respect to the poor, seems to be, to make the expenses for the support of pauperism as low as possible, and thus keep down the county tax for that object. Justice and humanity appear to be little thought of, in comparison with dollars and cents. The superintendents, and their subordinates, probably feel themselves under the necessity of acting in conformity with the predominant views of those from whom they received their places. May we not hope for better things now that the superintendents are responsible to the people directly, being elected by popular ballot? In making these remarks respecting the Board of Supervisors, we should state, that the majority of its members are from the country towns. Had the matter rested solely

with the city representatives, who are so situated as to become more conversant with the merits of the subject, the evils of which we are speaking would, we believe, long since have been remedied.

Next to want of accommodations, deficient nursing is involved in the the mortality. During the time we held the office of County Physician, we do not recollect that nurses for the sick were ever hired. This duty devolved upon fellow paupers, or vagrants, the latter being the most degraded persons that a city contains. How it has been of late we cannot speak from personal knowledge; but that very little has been disbursed for that object, may be surmised, when it is stated that the estimated cost of sustaining paupers at the Poor House during the last year was 59, 4-10 cents per week! not quite sixty cents a week for the support of an inmate of the Poor House! The Superintendents state this calculation with not a little complacency. They quote the cost of maintaining paupers in several other counties in which it doubles, trebles, and even quadruples the cost in the county of Erie—but they do not state in connection therewith, the comparison as respects the ratio of mortality! Indeed, the great mortality of our Poor House, in the report, is only noticed as adding about two cents per head to the cost of board per week! The matter does not seem (in the estimation of the superintendents) to call for any explanation, or comment, and, for aught the reader can gather from the report, the loss of life is as much a matter of congratulation with the superintendents and the Board of Supervisors, as the fact that they have cost the county less than 60 cents a head. We know not how it will strike others, but, in our view, the great economy which the report discloses, as compared with other counties, is no credit to us. Better far have footed up a larger amount of expenses, and a less number of deaths. If the citizens of Erie County are called upon to decide between life and money, we hope they have humanity and generosity enough to decide, not merely as tax payers, but as christian men.

But we have not yet presented all the statistics of mortality contained in the Report of the Superintendents of the Poor. The relief for the poor by the county embraces another arm than the Poor House. It has been, for many years, the policy in this county to expend a considerable sum for out door relief, i. e. to keep applicants out of the Poor House, (where was no room for them) by giving them a small weekly stipend. About twice the sum required for the Poor House was expended in this way during the past year. The operation of this system is to furnish a bounty for pauperism, and a premium upon deception—but we do not purpose to comment upon it in those points of view at this time. *The number of deaths*

in the city of Buffalo among those relieved out of the Poor House during the year, was 290! Small as the chances of life have been at the Poor House, they have hardly been less, as the poor have been situated in the city. The Report does not state the number of persons relieved in the city of Buffalo during the year. It states only the number relieved throughout the entire county, which amounted to 5,509. A proportion of this number were relieved in the several towns of the county; 1,002, the Report states, were aided to get to their friends or places of destination. Now, deducting the latter, the ratio of mortality in the city of Buffalo, was one to every fifteen (and a fraction) of all assisted in the county! Of course a large proportion, it is to be presumed, were not sick, but only destitute, but the Report furnishes no data for determining the precise number of those needing medical aid, in addition to other assistance. Adding together the number of deaths at the Poor House, and among the paupers out of the Poor House, and we have a total of 449, which is not far from one third of all the deaths that have occurred in Buffalo during the past year! What the particular causes are which account for the great ratio of mortality among the out paupers, we will not now stop to consider. But, we ask, can any reason be assigned why, if the sick, both in and out of the Poor House, had enjoyed the benefit of a commodious, and well regulated hospital, the mortality should have been greater here than at other places, for example, the city of New York? Is it not reasonable to assume that had the advantages for receiving and taking care of these patients been equal to those at Bellevue, the mortality would have been no greater? Observe, then, what would have been the difference in the result! at least *three-fourths* of the 449 that died during the year, would have been saved! Between three and four hundred lives (at the least calculation) would have been spared! Is this a matter of no interest, or importance in the minds of the citizens of Erie County? Is it a matter in which no moral responsibility is involved?

If this community fully appreciated the facts appertaining to this subject, there could not exist that apathy and apparent indifference toward it which now prevail. To suppose otherwise, would be to imply that the people of this County are not advanced in civilization so far beyond our predecessors, the Senecas, as we flatter ourselves we are. But, how is the subject to be brought to the apprehension of the public as it should be? We know of no way except through the efforts of the Medical Profession. It is peculiarly the province, and the duty, of medical men, to enlighten the public on subjects of this nature, and to incite to the full recognition of

the claims of humanity toward the sick poor. Until this is done, in this County, the profession surely are not without an occasion for self-reproach, and they are, in some degree, involved in the responsibility which attaches to the present state of things. Let the practitioners of this city, and of the several county towns, set the matter in its proper light before the public mind, and they will have discharged the obligation which rests upon them, whatever may be the ultimate results of their exertions. The hope that our humble efforts may contribute, in some degree, to impress the force of this obligation, has prompted the foregoing remarks.

There are other matters contained in the Report of the Superintendents which admit of comment. We designed to have remarked on the number of lunatics, and the provisions for the proper management of mental maladies at the Poor House. It will have been observed that at the expiration of the year there were 31 lunatics on hand, and 9 idiots. The reader may well wonder whether justice can be done to this class of unfortunates, the number of which suffice for the occupancy of a tolerably large Lunatic Asylum. We quote the portion of the report which relates to this subject, in which it will be noted, that the chief point which appears to be regarded is the "*safe keeping and confining of that unfortunate class of people.*" We must reserve discussion of this department of our system of *poor relief* for another number. The portion of the Report referred to, is appended as a postscript, to wit:—

"P. S. From necessity the Board of Superintendents feel called upon farther to submit to your honorable body more fully in this report, our present situation in reference to the Insane Department at the Poor House. We have thirty-four cells on hand in said department for the confining and safe keeping of that unfortunate class of people. While we have now on hand at the Poor House forty-one individuals of that class with whom there is no safety unless we have cells to confine them in—especially at night. Farther, there are three or four individuals now in the city of Buffalo, which are fit subjects of that department, and whom we necessarily shall have to take in charge immediately, which makes the number of eleven now virtually on hand, for which we have no place of confinement, for their own or others safety. In fact, in view of our present situation, and prospects ahead—judging from the past—we see no way but we shall be under the necessity of erecting some suitable building without delay for the reception and safe keeping of this class. And we would, therefore, recommend that such building be erected with capacity to accommodate at least twenty-five in number, additional to our present accommodations,

which may require the sum of about one thousand dollars to complete the same. We would, therefore, recommend the raising of the sum of one thousand dollars for said purpose, in addition to the sum before asked for.

Respectfully,

J. S. KING,
LESTER BRACE,

Superintendents of the Poor of Erie County, N. Y.

October 13, 1848."

We should not do justice to the economy with which the medical department of Poor Relief is managed in this county, without noticing the salary which is allowed by the Superintendents for medical services. The Physician's salary for the past year (as we are informed) was \$400, and the same salary is continued for the present year. For this sum it is expected that medical and surgical services will be rendered, not only at the Poor House, but to all the sick poor maintained by the County in the city, and medicines furnished!! It is, perhaps, a sufficient commentary on the emoluments of the office, to remark, that the compensation for medical attendance and medicines, is at the rate of less than a dollar a head for those who died during the last year! A salary of \$400 for medical attendance and medicines for a number of cases of which 449 proved fatal!

But, to elucidate the matter of compensation more fully, we will consider it somewhat more minutely, with the aid of slate and pencil. In the absence of any precise statement with respect to the number of patients that came under medical treatment *in* and *out* of the Poor House, let it be assumed that they amounted to six times the number of fatal cases. To assume a larger number, would render still more striking the results at which we shall arrive; and to assume a smaller number, would involve a larger ratio of mortality than one in six. Upon the above assumption, there were treated, *in* and *out* of the Poor House, during the year, 2,694 patients. Medical and surgical attendance and medicines required for that number of patients were furnished for the sum of \$400! According to this, the compensation for medical or surgical services rendered to each patient during the whole term of his illness, inclusive of all the medicines required, amounts to something less than 15 cents! The reader may now be curious to inquire respecting the average number of patients under treatment daily, and the daily compensation *per capitem*. In order to arrive at these points we must assume an average duration of illness for each case. Taking a low estimation, let it be *seven days*. Suppose, then, the average duration of each case to be seven days; the average number

of new cases daily, according to the foregoing data, will be about seven. Hence, the average number of patients under daily treatment will be *forty-nine*! A portion of these cases, it will be borne in mind, were at the Poor House, and the remainder in different parts of the city. In order to form an idea of the relative number at the Poor House, and the number in the city, it seems fair to assume that the same relation which obtains between the deaths, will be applicable. Calculating from the relative numbers of deaths, there were 18 patients under daily treatment at the Poor House, and 31 to be visited, or prescribed for, in the city. Now the daily compensation, at a salary of \$400 *per annum*, is a fraction over one dollar and nine cents, *per diem*. For about one dollar and nine cents *per diem*, then, 18 patients at the Poor House, and 31 in the city are expected to receive requisite daily medical and surgical attentions, inclusive of medicines! By a simple calculation it follows, that for medical or surgical services, inclusive of medicines, for each patient *per diem*, the County Physician received as compensation, the sum of a fraction over *two cents*! Curiosity suggests another arithmetical step, viz., to ascertain the average amount of the above sum which should be deducted for medicines, in order to reach the amount of *honorarium* which the county of Erie appropriates for professional services. Here, we confess, our arithmetic fails us. We must leave this interesting problem for some one more conversant, than ourselves, with the mysteries of the calculus; for, it is manifest, that it would lead us into infinitesimal quantities. The compensation which the present incumbent of the office of County Physician enjoys, is the same as that allowed for the last year, and, it is almost needless to add, the office for the last few years has not been held by the same person for two successive years.

New Medical Schools.—We learn that a new medical school has lately been organized in Iowa, and, also, another added to the medical school, already existing in Illinois. We have not been favored with circulars from either. A correspondent of the *Western Lancet*, however, presents the readers of that valuable periodical with several extracts from the circular issued by the latter Institution. That we may do justice to this new enterprise, we transfer to our columns the article referred to, simply remarking that the sentiments contained in the concluding paragraph meet our hearty concurrence:

“On our table lies the Prospectus of this Rock Island Medical School. In this publication the following sentences occur, which sufficiently evince the nature of the enterprise, and the prospects of success which cheer it on.

'That the selection of instructors has been judicious, and that every member of the faculty will sustain himself before the classes *may not be* questioned.' 'They have reasons (not revealed) for believing that a larger number of students *may* assemble at Rock Island than has ever composed *the first class* of any medical school in the Union, and that the resulting graduating class *may be* larger.'

In the prospectus we have the following lines of poetry:

"No pent up Utica contracts our powers,
For the whole boundless UPPER VALLEY'S OURS."

And again the Prospectus indulges other poetic excursions; though stated in stilted prose.

"No fancy sketch which the imagination can draw can compare with the beauty of the site; and its eligibility, when the Mississippi shall be bridged, can only be rivalled by its beauty. The bridging of the river at this point is so familiarly spoken of by the inhabitants as an improvement and work of art certain to take place before the elapse of many years, that the prediction may not be looked upon as an idle day-dream, that a flourishing Medical School and Hospital *may*, ere long, occupy the very same grounds on which General Taylor was ordered a few years ago to seize and erect a fort in the then wilderness and hostile Indian country. It *may not* come to pass during the presidency of General Taylor, whose policy as far as regards internal improvements, is not very lucidly revealed; neither during the presidency of General Cass, whose letter on river and harbor improvements was certainly laconic; nor yet indeed under the second term of service of the 'northern man with southern principles,' ex-president Van Buren, whose whereabouts on these small questions of river, lake or island improvements is not as well understood of late, as are his views on the great 'Wilmot Proviso question.' But nevertheless at no very remote period, under the administration of some wise president, these things *may* all come to pass on Rock Island, and medicine flourish in this panorama, par excellence, of beauty and promise, where but a few years ago, a lone military post, in the heart of the Indian country, was the solitary herald of civilization."

We have italicised the word *may* in the above and are reminded of the meaning of the word, which is—to be possible, perhaps, by chance, peradventure. There can be no objection to its use in the Prospectus.

After this eulogy of Rock Island the professors come in for a glorification.

The professor of the Theory and Practice has 'views on malarious fevers peculiarly his own, and which differs essentially from the doctrines of the books, and their correctness is proved from the uniform success of his practice, and that of the numerous pupils who have read medicine with him.' Happy pupils! O most excellent master! 'No student ever forgets the doctrines and precepts he receives from this master.' *Quantum sufficit.*

The professor of materia medica has 'a thorough acquaintance with his subject' and moreover 'his happy arrangement disarms the materia medica of much of the dryness and confusion incident to the old method of teaching still pursued in most of the schools.' *May be* Pereira borrowed this "natural historical arrangement" from Rock Island.

The prospectus promises to receive "obligations" from such students as have no cash.

Such are the aspirations and inspirations—poetic and medical—of the

Rock Island Medical School. Magnificent in conception; exalted in aim; daring and far reaching in destiny!

In all soberness of critical animadversion we lament very much the bad taste and defective judgment, manifested in the prospectus of the Rock Island Medical School. It is a most humiliating spectacle to witness—a professed standard of professional propriety, a fountain head of medical instruction, urging its pretensions, and ushering itself into notice by such self-landation conveyed in a style of such unseemly grandiloquence." H.

Appendix to the Clinical Lecture on Aphonia, etc.—By Prof. LEE. Case of Aphonia.

Since the clinical lecture on aphonia and stammering, contained in the department of original communications of this number, was in type, Dr. Lee has forwarded the following note, giving an account of another interesting case of aphonia, which we introduce here, as an appendix to his valuable article:—

A very singular case of loss of speech, somewhat resembling the above, has recently been presented at our Clinique. M. C., a little girl, three years of age; was bitten in the cheek when twenty months old, by a rabid cat. The wound healed speedily, but about five weeks from the occurrence of the accident, violent spasms came on, affecting nearly all the muscles of the body, and which continued at longer or shorter intervals from Sunday until Friday evening following. The spasms then ceased and she gradually got better; but it was soon ascertained that she had lost the power of speech, for she had begun to talk considerably, and also the use of her limbs. The parents state that during the hydrophobic attack, she was several times so far reduced as to be supposed to be dead, and was actually laid out once or twice, when she recovered. She now makes a few harsh sounds, like the deaf and dumb, but can not articulate. Her hearing is quick; her face is not wanting in intelligence; but she is remarkably susceptible to bright lights, and sounds; constantly in active motion, and little inclined to sleep, it often requiring two or three hours to calm her to rest. She has a constant propensity to stand on her head and turn somersets, and she is employed a great deal of the time in such feats, traversing the room in a succession of somersets, with astonishing rapidity. If left alone for a few minutes she is often found standing in her head in the rocking chair, her hands resting on the arms of the chair, while her feet are thrown up against the back of the same. The top of the head is preternaturally hot over a space of two or three square inches; her pupils are much of the time considerably dilated. Her appetite is good, as is also her general health.

The only rational explanation of the above case, appears to me to be that which attributes the loss of speech, and the other symptoms, to cerebral derangement, consequent upon the disease which caused the spasms, &c. Some organic change has occurred, incompatible with the normal exercise of the intellectual faculties, and reducing her to a state bordering on idiocy. The case is therefore, probably, a hopeless one; though it is impossible to predict with certainty, what will be the result. Medical treatment, however, promises but little.

Copland's Dictionary of Practical Medicine, Part XX.—This comprehensive and erudite work is slowly advancing toward completion. Part twentieth has been recently issued, embracing *Poisons and Pregnancy*. There appears to be no flagging, either on the part of the Author or American Editor. This is all that need be said by way of encomium, for the profession are sufficiently aware of the merits of the early numbers. When finished it will constitute in itself a medical library. As a work of reference it will be immensely valuable.

New Work on Medicine.—The Southern Medical and Surgical Journal announces the publication of a new work on medicine, by Dr. Tomlinson Fort, of Milledgeville, Georgia. The editor states that Dr. Fort has, for forty years, occupied the most prominent position of any man in the medical profession of Georgia.

Geneva Medical College.—We stated in a previous number, that the class in attendance at this Institution numbered *fifty-three*. This was the number at the commencement of the term. The number has since (as we are informed) increased to *sixty-three*.

New Publications.—Several new medical publications have lately been received, which we shall notice, or review, so soon as we have been able to bestow upon them proper examination.

Buffalo Medical College.—The annual session in this Institution commences on this day, Wednesday, Nov. 29. From the number of students

already assembled, the class may be expected to exhibit a considerable increase over the attendance at the last session, notwithstanding the five months' course, and a repudiation of the credit system *without a single exception*. About forty were in attendance at the preliminary dissecting term.

Buffalo Hospital of the Sisters of Charity.—We are happy to state that this charitable Institution is in successful operation. About sixty patients have already been received. Additions to the building are in progress, and farther enlargements in contemplation.

Medical students are admitted to visit the wards with the attending Surgeon and Physician, Wednesday and Saturday of each week, on payment of a small fee for the benefit of the hospital. Clinical lectures by the attending Physician and Surgeon will be given on Saturdays, which are to be exclusively devoted to clinical instruction, no other lectures being given at the College on that day.

Hospital at Syracuse.—We perceive by a paper published at Syracuse, which has been forwarded to us, that the Common Council of that city have already taken steps to provide hospital accommodations in anticipation of the Cholera. This evinces a degree of prudence and humanity which other places would do well to imitate. Let proper sanitary regulations be at once adopted, and proper accommodations for the sick provided, and the visitation of Cholera, if not averted, we may reasonably hope, will be divested of much of its malignancy. We commend this subject to the attention of medical practitioners, whose duty it is to bring it to the notice of the proper authorities.

Starling Medical College.—Lynde Starling, Esq., of Columbus, Ohio, has added to his donation of \$30,000 to the Medical Institution bearing his name, an additional sum of \$5000. A college edifice, including a small hospital with thirty beds, is to be commenced next spring. The generous donor deserves to be canonized in the calendar of medical saints, for we suspect such a munificent endowment of a medical College by a single individual, is without a precedent in this country.

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ORIGINAL COMMUNICATIONS.

ART I.—*Rhinoplasty, Blepharoplasty and Cheiloplasty in the same Patient.* By Dr. F. H. HAMILTON.

B.—Aged about 25. When a child Mr. B, fell into the fire and was so terribly burned that he lost a great portion of his nose; his left eyelids became deformed by an extensive retraction and eversion of the upper lid, and by a similar retraction and eversion of the lower lid; the left angle of his mouth was closed to the extent of nearly an inch, and the whole mouth drawn to the left side; the left side of the face became throughout a solid and irregular cicatrix.



This was his condition when he first presented himself to me in March, 1847. My *first* operation, made in presence of the medical class of the
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University, was upon the left upper lid. A triangular shaped piece was cut from the lid, the base of which corresponded with the tarsal border; and above this, along the line of the superciliary ridge an incision was made of about eight lines in length, (1) from which the dissection was continued downward, until the upward retraction of the lid was entirely relieved. The triangular wound on the tarsus was now closed by two delicate sutures.

The *second* operation was made at the same time upon the lower lid; and in the same manner.

The *third* operation was made a few days later, in presence of the class also, upon the mouth. The mouth being much drawn to the left, the right commisure was made to approach near the centre of the jaw; while the left commisure was also advanced toward the mesian line by adhesion; the contraction of the cicatrix had also lifted it up five or six lines above the opposite commisure. I first made an incision upon the left angle, carrying the knife a little *downward* as well as outward, to the extent of about eight lines. The same operation was immediately made upon the right angle, the knife however being here carried a little *upward* and outward about six lines. Both of these incisions were commenced from within, the mucous membrane being first incised about four lines above the commisure. and from thence dissected down to the commisure, after which the muscle and integument were divided together (3-3). The flaps of mucous membrane were now brought over and secured to the tegumentary edge of the wound by three light sutures on each side.

As soon as the incision upon the lids and mouth had healed, and the operation upon the lower lid was found to be unsatisfactory, the *fourth* operation was made. The eversion and retraction were diminished, but owing to the complete inelasticity of the integuments below, the improvement was not such as was desired. I therefore made a horizontal incision below the lid and then dissected upward to the border of the tarsus. A flap was now raised from the lower part of the temple, the pedicle of which reached the outer extremity of the incision just made, and by torsion this flap was placed in the wound below the lid, and secured by sutures and compress.

These operations having been completed, the patient went home to re-establish his health, which had suffered some from his confinement and the constant irritations of successive operations.

In the spring of 1848 he returned and on the 11th of March, in presence of ten or fifteen of the medical students and several physicians, I prepared to restore the right side of his nose. This, the *fifth* operation, consisted of

two distinct stages. The right side of the face being unscarred and healthy, I determined to make here the operation of "sliding" (*par glissement du lambeau*). The vestige of the nose was first made raw upon this side; two parallel incisions were then made outward (4), one commencing at the point where the ala of the nose should terminate below, and extending outward about two inches, care being taken to avoid the duct of Steno; the other commencing about an inch higher up, and reaching outward the same distance. Both incisions were deep. The intercepted piece was now dissected up from the nose outward to the extent of the tegumentary incisions. The infra orbital artery required a ligature. Hæmorrhage having ceased, the flap was brought forward and with sutures, adhesive straps and compresses secured in place upon the side and top of the right nostril.

The second stage of this operation consisted in separating, two weeks later, the flap thus raised, from its base so as to allow the cheek to fall back to its place, and at the same time relieve the strain upon the nose. The incision was made a little convex outward and at a point corresponding to the position of the base of the ala, so as to leave a depression resembling the natural depression at this point.

Erysipelas having twice during these last operations attacked his face, we did not attempt the restoration of the opposite side until the last of March.

Sixth operation. This was divided into three separate stages. No integument could be taken from the left side of the face, and I was unwilling to make a new scar by operating from the forehead. Having already tested the courage and endurance of my patient, I concluded to make the flap from the right hand.



March 29th I dissected from the ball of the thumb of the right hand a piece of integument of a quadrilateral form, (5), two inches in length by one and a half in breadth, its longest diameter extending from within outwards and its base or point of attachment resting over the radial border of the metacarpal bone of the index finger. The palmar portion of this flap was

at this time covered with a heavy cuticle. The wound was closed as nearly as possible with adhesive plasters: the flap was turned back, dressed with simple cerate, enveloped in cotton, the whole being secured by a few light turns of a roller. In six days about one-fourth of the flap had sloughed; the sloughing being arrested by yeast poultices. At the end of two weeks the flap by sloughing and contraction had diminished to about half its original size. It was however three times its original thickness and vascular; the thick cuticle had fallen off, and left a soft, pliant skin, and the edges were cicatrized.

On the 12th of April, having placed upon his head a cap furnished with straps, the flap and the nose were made raw, and by means of a sling to which the straps from the cap were attached, the arm and hand were brought up, and the skin secured to the nose by five small sutures. A pillow was slung under the arm-pit, against which the elbow rested. Two students now remained in constant attendance, being relieved every four or six hours by others. The patient was kept in this position seventy-two hours, when union having taken place, the flap was separated from the hand. Of that which remained attached to the face, a small portion sloughed, but sufficient remained to nearly complete this ala.

The patient now returned home, and in October, 1848, he again placed himself under my care in the "Buffalo Hospital of the Sisters of Charity."

Seventh operation. The left ala was not complete, and on the — of Oct. I raised by careful dissection, with instruments adapted to the purpose, a thick plate covered with mucous membrane from *within* the nostril, leaving a pedicle downward and outward at that part of the opening of the nostril which is nearest the external commissure of the mouth: this plate I brought out, and raising it, I attached it to the apex of the nose and to the lower border of the ala.

This operation, which is entirely original with me, I was enabled to make from the fact that the burn had destroyed the roots of most of the hairs within the nostril, and had also left the mucous membrane and the subjacent tissue much thickened. The success has exceeded my expectations.

ART. II.—*Report on the Concours relative to the Question of Apparent Death, and of the means of preventing Premature Burials.* [Commission, Messrs. Dumeril, Andral, Magendie, Serres, Rayer—reporter.]

From the "Comptes Rendus Hebdomadaires des Seances de l'Académie des Sciences." Translated by JAMES BRYAN, M. D., member of the National Medical Association, Professor of Surgery in Geneva Medical College, N. Y.

The very old opinion of the uncertainty of the signs of death, strengthened unfortunately by the deplorable errors of ignorance and haste, has been increasing in France for about a century, since the publication of the celebrated dissertation of Winslow: *An mortis incertae signa minus incerta a chirurgicis quam ab aliis experimentis?* Paris, 1740. A French translation of this little work, published by Bruhier d'Ablincourt, under the title of, "*Dissertation sur l'incertitude des signes de la mort,*" with the remarks of the same author on the necessity of a general regulation on the subject of interment and embalming, produced a strong sensation in the public mind.

Bruhier collected a hundred and twenty two cases, whose title alone was enough to produce alarm, viz:

"Fifteen cases of persons buried alive; Four cases of persons opened before their death; one hundred and three cases of persons supposed dead, who were not, the greater number of whom were restored to life, previous to inhumation."

Bruhier was so careless as not to be critical in the choice and appreciation of the facts which composed this long enumeration. Louis, secretary of the Royal Academy of Surgery, thought to allay the excited public feeling. He demonstrated with a good deal of ingenuity, that a large number of premature burials, cited by Bruhier, were not well substantiated, and that the greater portion of the real and well established cases were due to the deplorable ignorance of those who were connected with them.

The letters of Louis "on the certainty of the signs of death," effected the object completely. He may be blamed for considering certain phenomena, such as the insensibility of the globe of the eye to the touch, the formation of a glairy veil on this organ, as certain signs of death; but he has the credit of having proved, from observation made on more than a hundred subjects, dead of various diseases, that *cadaveric rigidity* is a certain sign of death.

Nysten afterwards confirmed this by numerous examples.

Stimulated by the experiments of Haller on irritability, he showed that the absence of muscular contractility, under the influence of galvanic

agents or of direct stimulants, was a new and certain sign of death; and one which could be verified before general putrefaction of the body. The experiments of Nyston were made (in 1811) in the Hopital de la Charité, on about forty subjects, which had died of the most common diseases.

Since this, it has been generally admitted, at least in France, that death may easily be determined, by physicians, before decomposition of the body. Nevertheless, a small number of them still insist that putrefaction is the only certain sign of death.*

For the establishment of this opinion, the names of foreign physicians of distinction are quoted. The anxiety of the public has also been increased by the foundation, in a number of towns in Germany, of dead houses, destined to receive the bodies of persons, until putrefaction shall have commenced.

Such was the opinion and state of the question when, at the session of February 13th, 1837, a letter was read to the Academy of Sciences, from Manni, professor in the University at Rome, in which he proposed to advance funds for a special prize of 1500 francs, for the best memoir on the question of apparent deaths, and the means of remedying the serious accidents which too frequently result from them. After having consulted the Section on Medicine and Surgery, the Academy took the offer of Manni into consideration. A royal ordinance, dated August 5th, of the same year, authorized the acceptance of the funds, and their appropriation to the object proposed. Consequently, the Academy proposed, in 1837, for a prize to be awarded in 1839, the following questions:

What are the distinctive characters of apparent death? What are the means of preventing premature burials?

The Academy [received seven manuscript memoirs. Several of them confirmed important opinions which had not before been established. The awarding of the prize was postponed to the year 1842.

The Academy hoped, by this new delay, that the authors would be able to give their productions that degree of perfection which the importance of the subject demanded. In 1842, the Academy received again, seven memoirs. The commission, disappointed in their aims, decided, with regret, that this year, also, no prize could be awarded.

NOTE.—The citizens of Philadelphia will long remember the great caution taken by the late Dr. Physic in his last testament, that decomposition should take place previous to his burial. For this purpose his body, at his own request, was kept in a warm room for several days, until it became offensive to the whole house.

In submitting this subject to a concours, for the year 1846, and for the third time, the commission feel bound to declare that the reports of premature interments, indicate, generally, rather the ignorance and carelessness of the authors of these evils, than the uncertainty of science. It demands, with other things, a complete exposition of what is actually known on the question proposed, in addition to which, it desires, especially, new observations on the condition of life and death in order to render the diagnosis more prompt and sure in the small number of cases which are doubtful in the mind of the physician.

Six memoirs have been addressed to the commission for this new concours. The Academy have sent to the commission on the prize of Manni, several printed works, and some other documents, relative to the question proposed.

Only one memoir has appeared to the commission worthy of reward.

The first question proposed by the Academy was the following:

What are the Characteristics of Apparent Deaths. Before entering upon the first question, the author of the memoir observes that the history of apparent deaths, show more than any other perhaps, how necessary it is to be cautious in adopting an observation, and understanding fully the importance and truth of the fact given.

With numerous observations on premature interments, cited to prove the uncertainty of the science in reference to the signs of death, the author of the memoir, Dr. Bouchut, thinks that all these facts should be carefully studied and sifted in proportion to their importance. The author has shewn in the matter a talent for criticism, of which the celebrated Louis has given a model, which it is difficult to surpass. Dr. Bouchut classes the observations on premature interment in three categories.

The first of these confirms the mistakes made by physicians. One of these deplorable errors has been attributed to Vesalius. According to some this celebrated anatomist applied the scalpel to the body of a Spanish gentleman still living; according to others a female was the victim of the homicidal error. Two versions so different render the fact doubtful. Dr. Bouchut remarks, that no contemporary Spanish writer makes mention of the error attributed to Vesalius. Dr. Fernandez Morejon, author of a bibliographical history of Spanish medicine, and Professor Burgrave, of Brussels, who was devoted to learned researches on the life of Vesalius, have equally asserted that this pretended error of Vesalius was a fable, invented by calumny, a fable unfortunately believed for a long time, and

promulgated by Albinus and by Boerhaave in a preface to the works of the celebrated Belgian anatomist.

The second mistake was committed by Pere, a celebrated accoucheur. A female at full term appeared entirely dead. Called to perform the Cæsarean operation, Pere reports, that the assistants, persuaded that the female was entirely dead, pressed him to operate. "I also thought so, for I observed no pulsation in the region of the heart, and a mirror placed over the face presented no sign of respiration. Applying the instrument to the female, she trembled and gnashed her teeth and pouted her lips, which so frightened me that I resolved never to operate again without being quite sure." Pere then evidently acknowledges that he had determined too soon, to perform the cæsarean operation, and the fault which he committed cannot be attributed to art.

Finally, it is said that the Abbe Provost, struck with apoplexy, in the forest of Chantilly, was considered dead, and that a surgeon of the village opening the abdomen, by the direction of the public officer, with the view of finding the cause of death, the celebrated author of *Masson Lescant* cried out and died in a few minutes.

This anecdote has been received as true by many legal physicians, and by the authors of the *Biographie Universelle*. Dr. Bouchut, after extensive investigation, is convinced that there is no foundation for the belief that this horrible accident had occurred. For the rest, on the other hand, the whole blame rests with the surgeon, for it is well known in apoplexy, that the circulation continues and the pulse may be easily felt.

The author of the memoir concludes his remarks on these cases by saying, that of the three most serious errors with which the physicians are charged, two were probably not committed, and not one can fairly be attributed to the uncertainty of the science.

The second category of facts relative to apparent deaths taken for actual, and followed by premature inhumation, comprehends a number of cases which must unhappily be considered as too true. The authors of these mistakes were parents, servants, nurses or other persons who had not sufficient intelligence to distinguish between life and death. Several individuals which they have considered dead, and were preparing to bury, have been saved by physicians, who, having opposed their burial, have succeeded in resuscitating life considered as lost.

Finally, a third category embraces a large number of histories, or anecdotes, whose details are unworthy of credit; and which have not even been admitted as true by most of the authors who have written on this subject.

With the impossibility of now deciding on cases published long ago, the author has examined and discussed those of more recent occurrence, and shows by public documents, obtained from the vicinity by means of the local public authorities, the uncertainty and falsity of these accounts. In fine, persons unacquainted with medicine after a too hasty and superficial examination, have pronounced persons dead who were not. These unhappy mistakes have always been made by individuals unacquainted with physiology or medicine, and the number of cases has been exaggerated.

The author then takes up the first question proposed by the Academy.

What are the characteristics of apparent death?

The observations and experience of Dr. Bouchut have brought him to this result, viz: that all the apparent deaths, especially those resulting from asphyxia and syncope, present, whatever may be the diversity of the symptoms, a common character, *the continuation of the pulsations of the heart*, which distinguishes them from those of real death.

This important fact, in the history of these cases, has attracted the particular attention of your commissioners. Not only have they repeated the observations of Dr. Bouchut, on the persistence of the action of the heart in cases of apparent death, but they have gone so far as to make new experiments in order to give this character its full value.

Since the time of Frederick Hoffman, syncope has been generally attributed to a complete cessation of the functions of the heart. This opinion was professed by Bichat and his followers in France, and has been repeated by the more recent medico-legal writers. Dr. Bouchut has stated, that in the most complete state of syncope, with loss of sensation and motion, and with coldness of the body, there is not an entire cessation of the contractions of the heart, but only a diminution in the frequency and force of its action. To the support of this opinion, Dr. Bouchut cites the case of a man, who, after a wound of the radial artery, has so considerable a hemorrhage, as to induce, in a short time, several severe syncopies. Insensible to stimulants, he was completely unconscious; his body as white as marble, was cold; no pulse in the wrist; the beating of the heart imperceptible to the hand; but by auscultation it could be merely perceived at distant intervals.

In other analogous cases, characterised by a general palor, coldness of the body, loss of intelligence, of sensibility, and of movement; cases in which respiration was imperceptible or very weak, the author states that the pulsations of the heart, more or less feeble, were reduced to twenty or even fifteen per minute. But, in all these cases of syncope from hemor-

rhage carried to the greatest extent, these beatings of the heart were easily perceived by auscultation, and thus distinguish apparent from real death.

Not only in cases of syncope, the effect of extensive hemorrhage, does Dr. Bouchut insist on the existence of pulsations of the heart; for he cites the case of a young hysterical woman who became suddenly motionless and voiceless, whose limbs were completely rigid, the surface and senses entirely insensible, in whom the action of the heart proved that life was not extinct.

Two of the commission (Magendie and Rayer) have several times observed the pulsations of the heart in very severe syncopies, which presented all the appearance of cases of *apparent death*. James Copland and M. Piorry have also expressed the opinion that the action of the heart continues in most, if not in all cases of syncope; but the commission is of the opinion that no one has been so accurate, or demonstrates the importance of this fact by so many cases as Dr. Bouchut.

While, however, we rarely observe syncope in men, and as cases of syncope are of unequal severity, and as some are so slight as not to be considered cases of apparent death, two of the commission (Magendie and Rayer) have thought that they ought to test the value of this sign (the pulsations of the heart) by numerous experiments on animals which approach man in the character of their organization.

In these experiments, your commissioners have produced syncope in every degree, frequently almost to death, and to death itself. Without entering into a long detail of these matters, we will confine ourselves to a statement of the means employed, and the facts observed. After having adjusted a syringe to the carotid of an animal, a quantity of arterial blood was drawn. This was repeated (the emission) several times until the animal was in a condition apparently dead, sometimes so decidedly that when the syringe was taken from the carotid, this vessel not only did not pulsate, but scarcely bled, or did not at all. In this condition, the animal entirely insensible, evacuated its urine and feces as animals do in articulo mortis; the gums and inside of the lips were pale and cold; the limbs contracted: the cornea and globe of the eye insensible to the touch, and respiration very little or not at all apparent. Now in this state of syncope, the pulsations of the heart were easily perceived by auscultation, only the two sounds were not perceptible, but were sometimes represented by a simple *tac*, which was however very distinct.

A large abstraction of venous blood produced the same results. In order to determine the symptoms of apparent death, in animals, by the abstraction of venous blood, it is not sufficient to open the large veins, it is neces-

sary to introduce a tube into the right side of the heart, drawing the blood out by means of a syringe, taking care not to allow of the ingress of blood, to the heart. One of these animals, after the loss of venous blood, was thrown into so complete a state of syncope, that the cornea was insensible to the touch; the pupil at first contracted as in the ordinary agony, became expanded as in the instant of death. In this animal, entirely insensible and motionless, although its cords were removed, and it was excited by being pricked, for some time occasional pulsations of the heart were observed. Two minutes after the last pulsation of the heart, on opening the chest, the auricles presented a vermicular movement, similar to that observed when the heart is removed from an animal.

In some of our experiments on apparent death, produced by the abstraction of blood from the right cavities of the heart, a quantity of air having been introduced into its cavities, the pulsations of this organ were not only very distinct, but were accompanied with a true gurgling, (*gargouillement*) and the animal died immediately.

To sum up, our observations on man and experiments on animals, experiments in which syncope was carried to the greatest extent, have fully confirmed the fact, on which the author of the memoir has insisted, viz: the persistence of the pulsations of the heart in syncope, and their perception by auscultation.

We proceed to add a few remarks in reference to certain syncopies, independent of hemorrhage; which are said to have been observed in persons who had the singular faculty of voluntarily affecting the actions of the heart. The following fact (particularly in works on medical jurisprudence) has been frequently quoted; Col. Townshend, long an invalid, called Drs. Cheyne and Baynard, and Shrine his apothecary, to witness the singular experiment of dying and coming to life again. The Colonel placed himself upon his back; Dr. Cheyne applied his fingers to the radial artery, Baynard applied his hand to the region of his heart, and Shrine held a mirror to his mouth. In a moment he appeared dead, respiration ceased, with the pulsations of the arteries and heart. The looking-glass was not tarnished; a half an hour elapsed, and the spectators were about to retire, persuaded that he had become a victim to his experiments, when they perceived a slight respiratory movement, the pulse returned by degrees, and the invalid became conscious. He then sent for his notary, added a codicil to his will, and died very quietly eight hours afterwards.

Dr. Bouchut remarks, with justice, that all this has the air of improbability. But supposing that it be true, it does not prove that the heart did

not beat in the first part of the experiment; for auscultation has shewn, latterly, the continuation of the pulsations of the heart in large numbers of cases when the pulsations of the radial artery had entirely ceased, and in which the beating of the heart was not perceptible to the hand. All the physicians say that was the case very often in the Asiatic Cholera, in Paris, in 1832.

The other examples of voluntary and complete suspension of the circulation and respiration, cited by Haller, are not more conclusive or reliable.

We will close these observations on the state of the heart in syncope, with apparent death, with a remark which illustrates the importance of auscultation in the precordial region. The following case has often been cited. A pregnant female was considered dead for two hours. Regandeaux examined her, and could perceive neither the pulsations of the heart, nor those of the arteries. The mouth was frothy, the abdomen much enlarged, the orifice of the uterus well dilated, filled with the bag of waters. Rigandeaux decided, to turn the child and deliver by the feet, thinking it dead; with care and attention it was resuscitated in about three hours. Examined a second time by Rigandeaux seven hours after, she was considered dead, she presented no sign of life; but as the limbs were not cold, he forbade her burial, and two hours and a half afterwards he was told that she was restored to life. At present in a case like this, the physician need not be so long in doubt; by attentively auscultating the hearts of the fœtus and of the mother, the proof of life could be obtained. And a surgeon called to a case even more serious than that, viz: to a parturient woman, expiring, auscultation will be the means of detecting the continuance or cessation of the pulsations, and decide the moment when it is proper to hasten the delivery of the living infant, the mother being dead.

In asphyxia from strangulation, with apparent death, auscultation must equally decide as to the continuance of life. This conclusion results not only from clinical observations, but from experiments made upon animals. In this experiment the beating of the heart became slower, and slower; from 350 in the rabbit, it falls to 40 per minute, a convulsion occurs, and when the immobility and insensibility of the animal, with the absence of respiratory movements, seem to indicate that death has taken place, the movements of the heart are yet for an instant perceptible by auscultation. But after a moment's silence or complete absence of pulsations, insufflation of the lungs will not restore them, the animal is dead.

To observe all the modifications which the beatings of the heart undergo in all the degrees of asphyxia, from the beginning up to the instant when,

after appearing dead, the animal is really dead, two of your commissioners (Magendie and Rayer) repeated the following experiments a large number of times: They attached to the trachea of an animal, a tube with a faucet, which permitted the tube to be closed or opened at will. They have stated, as did Bouchut, that in apparent death resulting from asphyxia, from deprivation of air, there was a diminution of the pulsations of the heart from 300, or from 200, which they are per minute, (according to the age and the degree of agitation of the animal) to 20; in this depressed condition of the action of the heart, real death follows apparent death in a period which never exceeds two minutes.

It is known that infants, after delivery, have sometimes remained motionless and voiceless, and without respiration or any other external sign of life. Now, in this state of apparent death, known by the name of asphyxia of new-born children, auscultation is the means by which the physician detects the action of the heart and life.

In the table list which has been made of apparent deaths produced by cold, especially cold in the summer season, several authors have mentioned the diminution, and even the absence of the pulse; but auscultation has not been resorted to in these cases.

Dr. Bouchut cites the case of a man found on a public highway, in the winter of 1843, who was taken in a state of apparent death into the hospital Necker. The skin on the limbs was cold, covered with livid spots. There was no sign of sensibility or intelligence; the limbs were completely rigid, respiration almost imperceptible; yet, by means of auscultation the heart was observed to beat 32 times per minute.

In submitting animals to the influence of refrigerating mixtures, Dr. Bouchut observed that the decrease in the heart's action may be much greater. The following is his report of one of these experiments:

Twenty minutes past 12 o'clock, a rabbit was placed in a mixture of ice and salt. The animal had 25 to 30 pulsations of the heart in five seconds, or 300 to 350 arterial pulsations per minute. In a short time it appeared to sink; at one hour there was difficulty of respiration, 140 pulsations; in an hour and five minutes, 100 pulsations; in an hour and ten minutes, 40 pulsations; general convulsions of the trunk and extremities during three minutes; in an hour and a quarter, for four or five minutes the action of the heart could be perceived. In one hour and twenty minutes, the pulsations of the heart having ceased, pulmonary insufflation did not restore the animal to life.

Your commission have also produced apparent death in animals, by sub-

mitting them to the influence, more or less active, of frigorific mixtures, and have observed the progressive diminution of the heart's action. In several cases, where the trunk and members were really frozen, and solidified by cold, they have seen the beating of the heart reduced to four per minute. Besides this, they have made an operation well calculated to demonstrate the action of the heart in the last moments of life. In frozen animals, whose corneae were insensible and flattened, having exposed the precordial region, a platina needle, passed into the heart, indicated, by its oscillations, the beating of the heart from 10 to 8 times per minute. One of us, with the assistance of the stethoscope applied to the chest of the animal, could perceive the pulsations of the heart within, to correspond with the oscillations of the needle without.

M. Weber has shown that the movements of the heart in a frog may be suspended for two minutes, by applying to this organ the extremities of two threads of an electro-magnetic apparatus, and that the heart may afterwards resume its natural movements. They have also shown that when the poles of an electro-magnetic machine are applied to the medulla oblongata, or to the separated origins of the par vagum nerves of a frog, that the movements of the heart which fill it with blood are suspended. Two of your commission (Magendie and Rayer) have repeated these experiments also: they have observed, besides, that if two needles are passed into the chest of animals which are the nearest to man in their organization, such as a rabbit, a 'cabiais,' or a dog, &c, and place these needles in contact with the two poles of a pile, the movements of the heart will be suspended, but for a few seconds only. Your commission desire to recall their experiments to the physicians whose duty it is to examine the condition of the heart in these, fortunately very rare cases of apparent death from lightning, in which the suspension of the movements of the heart may be more decided than in ordinary cases, without being confounded with a final cessation.

It is known that some poisons act so energetically and promptly, that apparent death takes place immediately, to give place in a few moments to real death. The author of the memoir having made no experiments on this subject, your commission have thought it necessary, on account of the importance of the question, to examine for themselves into the condition of the heart in these circumstances. The results which they have arrived at, in all these experiments, fully confirm the law of the persistence of the pulsations of the heart, when death is but apparent.

They proceed to state a few of their experiments:—A rabbit was sub-

mitted to the action of a powerful poison. A grain of curare was placed under the skin, at the fold of the groin; six minutes afterwards the animal was in a state of apparent death; the pulsations of the heart fell from 220 to 72 per minute; very soon it was less and less frequent, then it could no longer be perceived. Two minutes of their cessation, the animal was opened; the ventricles of the heart were immovable, the auricles alone presented slight vermicular contractions.

Your commission would also state, that by the action of alcohol or of the preparations of digitatis, they could not produce apparent death, without the persistence of the beatings of the heart or contractions of the ventricles, perceptible by auscultation. The tenth of a grain of digitaline dissolved in alcohol, was introduced into the subcutaneous tissue of the back of a dog of middle size. At the end of five minutes, no effect being observed, another tenth of a grain of digitaline, dissolved in about six grains of alcohol, was gently injected into the jugular vein. Before the end of the injection, the beatings of the heart, which one of us listened to attentively with the stethoscope, ceased instantly; they were no longer obvious by auscultation, nor indicated by a needle passed into the heart, through the chest. After a half minute's suspension of the pulsations, a beating was perceived; afterwards the number perceived by auscultation, rose to 8 per minute, then to 12 (a number which always corresponded with the oscillations of the needle). The animal vomited, had convulsions, and the pulsations of the heart ceased, no more to return; the animal was dead; the heart was greatly distended and filled with black blood, the tissue of the heart, and even that of the auricles, did not contract when excited by the point of a needle.

In another experiment, the injection of digitaline dissolved in alcohol instantly arrested the action of the heart; for three minutes the needle introduced into the heart indicated no contraction, the ear perceived no sound. The animal was dead. Six grains of alcohol injected into the heart of a rabbit by the jugular vein, arrested almost instantly the heart's action; the ear and the needle denoted no contraction for two minutes, the animal was dead; on opening the chest the heart was irritated with the point of a scalpel without producing contractions; the cavities of the heart were filled with black blood. In other experiments with these means, the same results were obtained, viz: death more or less rapidly indicated by the cessation of the cardiac sounds.

Formerly, examples of apparent death were confounded with certain cerebral affections, which were accompanied with loss of sensation and mo-

tion. Dr. Bouchut thinks, with reason, that the Academy did not demand a description of all these diseases, nor the comatose or lethargic conditions which many of them present. He has confined himself to the characters which distinguish real death. In all these cases, as in the soporose conditions produced by narcotic poisons, the condition produced by prussic acid, the insensibility produced by chloroform, the existence of life is determined by auscultation. Dr. Bouchut remarks that observations made upon the sleep of hybernating animals, present considerable interest in reference to this subject. In the waking state, the warmest has 90 pulsations; in the sleeping and numb condition, the number is reduced to 8 or 10 per minute. Here the cardiac action, as in all other cases, is the evidence of life.

To sum up, apoplexy, epileptic or hysteric coma, narcotic poisons, diffusible poisons, alcohol, ether, chloroform prussic acid, &c.; congestion, asphyxia and syncope, in all their forms and degrees; all the cases, in fact, which are cited as examples of apparent death, may be distinguished from real death by the pulsations of the heart.

Such is the answer made by the author to the first question proposed by the Academy, and it appears to us decisive.

The second question propounded by the Academy is as follows:

What are the means of preventing premature burials? The present legislation in reference to the deceased is insufficient.

In directing the public officer to publish the death, and requiring to allow twenty-four hours to elapse between the publication and the burial, the authorities consider that they have taken all necessary measures for preventing premature burials; but it must be remembered that the mere dictum of the officer of the civil authority does not present all the guaranties desirable.

The municipal ordinances require the physicians to state the deaths, in the large cities. This wise precaution will in future become a dead letter in the law.

The author of the memoir thinks, very properly, that this measure should be established all over France, as well in the small as in the large towns, in the country as well as the city. It is in vain to object that the large cities only can bear the expense necessary in these cases; that a large proportion of the country districts could not support this new charge; the measure should apply to those cases which cannot be postponed. It is to the signs of death that we are to look for protection against the dangers of being buried alive.

According to Dr. Bouchut the signs of death are either present and certain, or distant. The certain signs of death in man, are:

- 1st. Prolonged absence of the pulsations of the heart, by auscultation.
- 2nd. The simultaneous relaxation of all the sphincters, due to the paralysis of the muscles.

Finally the flattening of the globe of the eye and opacity of the cornea.

In the opinion of your commissioners, each of these signs has not equal value, or certainty. Some remarks on this subject are necessary.

Since the admirable discovery of Laennéc, we look in vain in science, for a single fact or a single rigorous experiment, to establish in man the continuance of life after the prolonged cessation of the pulsations of the heart as detected by auscultation; yet it is necessary to bear in mind how far the diminution of the heart's action, with a suspension of longer or shorter duration, may exist without a final cessation.

The expression of prolonged absence, employed by the author of the memoir, to indicate the definite cessation of the heart's action, does not appear to your commissioners sufficiently accurate, practical or precise.

They have thought that it was necessary to fix a limit which would leave no doubt on the reality of the final cessation of the functions of the heart.

The study of the pulsations of the heart in a great number of cases of death, would furnish useful data for this decision. It is true that in the last agony, the sounds of the heart are often marked by a noisy râle, which obscures their perception; but in the intervals which separate the last inspirations, and always in the last moment when the râle begins to cease, the last beatings of the heart may be perceived, by applying the ear to the cardiac region. In this silence, so near death, they are very distinct, long even after the hand applied to the chest distinguishes no movement; and the arterial pulsations, in the neck or extremities, are no longer perceptible. Now, in this state, and especially in the silence which follows the last expiration, the maximum interval between the pulsations of the heart, has appeared to Dr. Bouchut, for an adult man, about six seconds. The observation of numerous agonies of death, has afforded your commissioner (Rayer) nearly the same result, that is to say about seven seconds, as the maximum interval between the last beats of the heart.

After these clinical observations, your commission think that the absence of the pulsations of the heart, perceived by auscultation, over all the points that they may be either naturally or accidentally detected on each, *during an interval of five seconds*, that is to say during a space of time fifty times longer than that which is given by observation on the sounds of the heart.

in the last agonies of death; will leave no doubt of the final cessation of the movements of the heart and on the reality of death.

Otherwise the final cessation of the beatings of the heart is always accompanied with two very striking phenomena, and easily established; viz: the cessation of the respiratory movements, and the loss of sensation and motion. We may conclude, then, *that death is certain when we observe, in man, the definite cessation of the heart's action, which is immediately followed, when it has not been preceded by, the cessation of the functions of respiration, and those of sensation and motion.*

It has been objected, it is true, that the proofs of the cessation of the beatings of the heart, and of the cessation of the circulation, were insufficient, at least in certain cases; and that many persons in whom the cessation of the circulation was supposed to exist, have been restored to life. The objection was made, and the error was committed at a time when we could not, by feeling the pulse, and applying the hand to the region of the heart, decide with certainty on the state of the circulation. But the authors who, at this day, bring forward this objection, forget that by means of the ear, their pulsations may be detected, when neither the pulse or the hand applied to the chest, will indicate their existence.

The definite cessation of these pulsations is indicated by the cessation of the sounds of the heart. The observations of both the author and the commission leave no doubt in this matter. At the same time there is a fact which we desire to recall. A learned physician in Dublin, Dr. Stokes, says that in the typhus fever of Ireland, a disease in that unhappy country, that he observed, not only a great feebleness of pulse with no perception of the heart's action, by the hand applied to the chest; but a very decided diminution in the first sound of the heart, and sometimes even the entire absence of this sound, which it is known is naturally duller and less distinct than the second. But in no case has he observed the entire absence of the sounds of the heart before death, in individuals attacked with a disease which affects so decidedly the circulation.

It has also been objected, that a considerable collection of serosity in the pericardium, or an emphysema of the lower part of the left lung, may entirely obstruct the perception of the beatings of the heart by auscultation; but this assertion is not well founded. In these circumstances it will not deceive the ear of the physician, whose examination should never be finished while observing any flatness to any considerable extent, or an unusual sonorousness in the region of the heart. We will add (for, in a case as serious as that of deciding on death, we should not fear to mention the

most casual incidents) that auscultation, in cases of apparent or real death, should be resorted to over the whole chest, and both sides of the body, as the heart may be misplaced or pushed to the right side, in the rare cases of transposition of the viscera.

The physician should also distinguish simple suspension of the respiration from its final cessation. In the absence of rigorous observations on the maximum duration of the suspension of respiration in man, we will find a definite proof of the final cessation of respiration, in the fact of its coincidence with the phenomena of the final cessation of the heart's action. Up to this time, this sign has not been insisted on being taken from the state of the heart, a sign which indicates with certainty that respiration has ceased forever.

Many of the means taken to judge of the absence of respiration are completely at fault. It is supposed that respiration has ceased, when the flame of a taper placed before the mouth and nostrils, remains unaffected. Yet it is known that in gentle and feeble respiration, there is no appreciable movement of these bodies. On the other hand, the humidity on a looking-glass, applied to the mouth, is considered a sign of respiration; but this surface may be tarnished by the vapour which exhales from a corpse which is not yet cold—or from the humidity of the air. Another experiment is much more certain. In observing attentively the chest, and the abdomen divested of all covering, the complete immobility of these cavities with absence of the respiratory murmur on auscultation, indicate the absence of respiration; the persistence of the pulsations of the heart, will indicate that this function is only suspended; the cessation of these pulsations announce that respiration has ceased for ever.

To the final cessation of the heart's action, also, must we refer, to decide, with certainty, on the abolition or suspension of the functions of the nervous system.

To judge of the condition of life or death, by the condition of the nervous system, it is proposed to titillate the nostrils, to apply irritants to the schneiderian membrane, such as ammonia, acetic acid, &c; to resort to vesicatories, fire with a hot iron or hot oil, to incisions, to pinching the nipple, &c.; but these means produce neither sensation nor motion in individuals affected with serious cerebral affections, and still less those under the influence of chloroform or ether. The complete loss of sensation and motion is compatible with life, but when the action of the heart has ceased, it becomes the most striking evidence of death.

Your commission, then, think with the author of the memoir, that the

definite cessation of the action of the heart and arteries, known by auscultation, is a true sign of death; a sign the more certain, inasmuch as the cessation of the heart's action is followed, if not preceded by, the cessation of respiration and the functions of the nervous system.

The second immediate sign of death, admitted by Dr. Bouchut, is not in the opinion of your commissioners sufficiently certain. This sign is the simultaneous relaxation of all the sphincters from paralysis. According to the author, many of these muscles may be paralyzed during life; but he has never observed the simultaneous relaxation of all these muscles during life.

Your commissioners know that the sudden and almost instantaneous relaxation of all the sphincters, including that of the pupil, is in man, in a great majority of cases, the effect of death and not of disease. At the same time, we would not affirm that the general paralysis of the sphincters cannot exist in man previous to death. The relaxation of all the sphincters takes place in many of the agonies, when auscultation reveals the pulsations of the heart; and certain central affections may induce at once the relaxation of the sphincters, with that of the iris. The fact of this relaxation in the dying, cannot be observed except by a physician accidentally or intentionally stationed near the individual; and cannot be observed in a large number of cases. It is certain also, that we cannot in some minutes, by dividing the optic, the two seventh pairs, and the spinal marrow in the dorsal region, producing paralysis of the pupil, and the other sphincters, without producing immediate death. Two of your commissioners (Magendie and Rayer) have also verified, on decapitate animals, by prolonging, artificially, respiration, the fact that the beatings of the heart, in animals thus mutilated, remained very distinct and regular during several minutes.

From all these considerations, your commissioners think that the second sign of immediate death, admitted by Dr. Bouchut, is not sufficiently certain.

A third sign of death, considered as certain by Dr. Bouchut, appears to us of no greater reliability than this. Dr. Bouchut thinks, with the celebrated author of *Letters on the Certainty of Death*, that the formation of a glazed veil on the surface of the cornea, with flattening of the globe of the eye, is a certain sign of death. In opposition to this assertion, we have observed these symptoms in the Asiatic cholera, several hours before death, while the pulsations of the heart were yet perceptible by auscultation, and when the arterial pulsations were really imperceptible.

To conclude, of the three signs of death admitted by Dr. Bouchut, there

is but one, whose certainty is admitted by us. In pointing out a sign so positive, and generally so easily verified, to the attention of the profession, Dr. Bouchut has filled up a hiatus, left open by the authors of legal medicine, among the signs of immediate death. In reference to the *proximate* signs of certain death, Dr. Bouchut admits three, viz: cadaveric rigidity, the absence of muscular action under galvanic agents, and putrefaction.

The certainty of these signs is admitted by all medico-legal writers, and cannot be denied, so positive are the observations and experiments on which they are founded. In this part of his work, the author has explained with care the condition of the science, and refuted some objections which have been advanced, by the partizans of the dead houses.

For a long time, formerly, cadaveric rigidity was regarded as a sign of death; but the demonstration of the importance and certainty of this sign is due to Louis and Nysten, two French physicians. After death, the flexibility of the limbs disappears; the muscular tissue hardens; the limbs become immovable and stiff. No convulsive or tetanic condition presents this succession of phenomena, so as to deceive a physician. In cadaveric rigidity, the limbs yield to attempts at extension or flexion, as they do in an inanimate body. In convulsive affections the circulation continues; in cadaveric rigidity the pulsations of the heart, respiration, and the central functions, have entirely ceased.

The entire absence of the phenomena of muscular irritability, under the influence of different excitants, and of galvanism, is also a certain sign of death.

This fact has also recently been tested. It is pretended that in asphyxia produced by carbonic acid, and especially that produced by sulphuretted hydrogen, the muscles sometimes give no evidence of muscular contractility, by galvanism, before death. To test this matter, two of us (Magendie and Rayer) have made the following experiments:—A rabbit was asphyxiated by carbonic acid gas. After being accelerated, respiration diminished, and the animal fell, without convulsions, into a condition of apparent death, characterized by complete immobility and insensibility, the absence of respiratory movements, and by a considerable diminution in the actions of the heart, as determined by auscultation. A muscle of the thigh was placed in connection with one pole of a battery, while the other pole was placed in connection with the neck, which produced several shocks. This experiment was repeated several times, with the same result. For a time the pulsations of the heart were perceptible, they then ceased. A needle pushed into the heart through the intercostal muscles, presented no oscillations.

The chest opened, the heart was found motionless; the animal was dead. The muscles still contracted as often as the electricity was applied.

In another experiment, a dog of medium size and vigorous, was asphyxiated by sulphuretted hydrogen; under the influence of this energetic poison the animal was soon much agitated, it then fell into a state of apparent death, characterized by immobility and insensibility so complete, that no movement or appearance of feeling could be induced by the most violent pinching of the lips and tail. The respiratory movements were suspended; the beatings of the heart very slow, but very distinct, alone indicated life. A muscle of the thigh subjected to the influence of electricity, contracted powerfully for an instant after the cessation of the heart's action. The chest being immediately opened, the heart was found immoveable. After death the muscles of the limbs continued to manifest contractions on the application of electricity. Muscular irritability, then, is not destroyed in asphyxia from carbonic acid, nor from sulphuretted hydrogen. The abolition of this property of the muscular fibre remains a certain sign of death.

But this sign may not be appreciable until after a considerable time; the functions of the heart, of the lungs, and of the nervous system, may have ceased for a long time, death may have taken place, and the muscles will still contract on the application of various stimulants. Dr. Bouchut has referred to the observations which demonstrate the value of the phenomena of putrefaction or of cadaveric decomposition, considered as a sign of death. Death may always be distinguished long before the establishment of decomposition. The details into which Dr. Bouchut has entered on this matter appears to us to be justified by the efforts lately made in France, to create mortuary houses where bodies may be deposited until decomposition.

It is known that at the beginning of this century Hufeland, and several other physicians, having maintained that all the signs of death were uncertain except putrefaction, mortuary houses were established in many towns in Germany; at Frankfort on the Maine, where there was the most noted one, Hamburg, Wisbaden, at Weimar, &c. But although most of these still exist, yet their utility has become doubtful. The most of them are badly conducted, and their interior organization is very imperfect. Finally, for fifty years that these houses have been established, no body which has been placed within them, after a certificate of the physician had been given, has come to life.

To create this day, in France, dead houses to contain bodies until putrefaction, is to engage in an endless expense, which a large proportion of the

towns and districts cannot afford; but it is taking no notice of the other certain signs of death.

These remarks are not designed to apply to the creation of desirable places to receive, shortly after death, the bodies of the poor, whose families have not room for them.

It has been lately announced as a certain sign of death, the impossibility of raising bullae or blisters on the skin of the dead, by the application of boiling water or other excitants. Dr. Bouchut says this sign is uncertain: he has, indeed, produced by the action of heat or boiling water true blisters on the dependent or infiltrated parts of several bodies, some of which had begun to putrify.

It is true that blisters produced by hot water, during life, are generally surrounded by a red circle which those in the dead body are not; but Dr. Bouchut has seen old men and cachectic individuals (four hours before the cessation of the beatings of the heart) with the skin burned, presenting no red circles around the burnt points. One of your commissioners (Rayer,) in burning persons in the last agony, with the hope of restoring them to life, or of prolonging life, and doing the same on dead bodies, has arrived at pretty much the same conclusion as Dr. Bouchut. Indeed the areola which is formed, commonly, around a blister caused by a burn, is scarcely, or not at all visible in persons of color. The development of a blister and the deposit of a quantity of serosity under the epidermis, after the application of boiling water, cannot then be considered as a certain sign of life, sufficient to distinguish it from death. To condense this second part of Dr. Bouchut's work and the facts contained in it, your commission present:

1st. That the definite cessation of the pulsations of the heart, indicated by the cardiac sounds, is an immediate and certain sign of death.

2d. That cadaveric rigidity is equally a certain sign of death.

3d. That the absence of muscular contractions under the influence of electricity is a third certain sign of death.

4th. That general putrefaction of the body does not generally take place until long after the preceding conditions; that it is not necessary to wait for decomposition before proceeding to bury or embalm.

5th. That the cessations of the pulsations of the heart and of the circulation, the development of cadaveric rigidity, the abolition of the muscular contractility, cannot be appreciated except by physicians; the announcement of death should be confided exclusively to them, both in town and country.

6th. The possibility of establishing the existence of death previous to

putrefaction, renders the establishment of dead houses, such as are found in Germany, unnecessary; but that it is desirable that the bodies of the poor should be received until sepulture.

The importance of the questions proposed by the Academy, the manner in which Dr. Bouchut has studied them, and revolved them by new observations: the numerous experiments performed by your commissioners, will justify, we hope, the length of this report.

The work of Dr. Bouchut, excepting some imperfections, the most serious of which your commissioners have pointed out, appears to them remarkable for its terseness, the precision of its details, by the judicious manner in which the facts in relation to apparent deaths have been appreciated, by the profound discussion of the observations which have been made relative to cadaveric rigidity, the abolition of contractility, considered as certain signs of death, and, above all, the care which the author has taken to demonstrate that the *continuance* of the pulsations of the heart is the distinctive characteristics of apparent deaths, and that the cessation of the pulsations of this organ, detected by auscultation, constitutes an immediate and certain sign of death; a primary fact by which the author has responded to the call of the Academy, which demanded, especially, all necessary aids in rendering the distinction between apparent and real death more prompt and more sure.

With these considerations, your commissioners have unanimously awarded the Prize of Manni to Dr. Bouchut, as the author of the best Memoir addressed to it during ten years, that is to say since 1837, the time when the announcement of the prize was first made.

The conclusions of the report were adopted.

ART. III.—*Observations on the Pathology of Croup; with remarks on its treatment by topical medications*, By HORACE GREEN, A. M., M. D. New York. 12mo. pp. 115.

Dr. Green is well known to the profession, for his very instructive and valuable work on Diseases of the air-passages, in which he advocates the propriety of local treatment in diseases of the larynx and trachea, in the adult, and the direct application of therapeutical agents to the lining membrane of these cavities. The treatment thus recommended, though decried by many, has been adopted by the most distinguished physicians of Europe as well as this country; and Dr. Green is now acknowledged by all candid and unprejudiced minds, to have effected a

real advancement in the treatment of these dangerous affections. Not that he was the real originator of the local treatment of this class of diseases; or that he was the first to suggest the use of the solution of nitrate of silver, applied to the laryngeal surface by means of a sponge attached to a bent whalebone. Dr. G., himself, makes no such claims. But to him certainly belongs the credit of having first carried out the practice to any extent; of proving its practicability, safety, and efficacy, by a series of successful trials; of demonstrating, in the face of great opposition, the vast importance of local applications in laryngeal and tracheal affections, and their superiority over all other modes of treatment.

In the present work, Dr. G. proceeds a step further, and demonstrates the utility of the same local treatment in croup; cases of which, he states, were thus treated by him as early as 1842.

We shall present, in a few quotations, the opinions of the writer relative to the nature and pathology of the disease, and his mode of procedure. The following are his conclusions as to its pathology:—

“1. That true croup, pathologically considered, is a special or single disease; being dependent for its existence, like tubercular phthisis, on a peculiar or specific cause.

2. That its distinctive and essential characteristics consist in an inflammation of the secreting surfaces of the fauces, larynx, and trachea, which is always productive of a membranaceous or an albuminous exudation.

3. That the membranaceous concretion, which is found coating the inflamed mucous surface of the parts in croup, is an exudation—not from the membrane itself, but is secreted by the muciferous glands, which so abundantly stud the larynx and trachea.

4. That the exudative inflammation commences invariably in the superior portion of the respiratory passages, and extends from above downwards—never in the opposite direction.”

Again, Dr. G. remarks:

“2. The truth of the second proposition stated; namely, that the essential pathological character of croup is inflammation of the lining membrane of the larynx and trachea, attended by a concrete albuminous exudation, is unanimously admitted by the best pathologists of the day.

The plastic exudation which is poured out upon the surface of the mucous membrane in croup, forms with great rapidity. It consists mainly of fibrine blended with mucus in various proportions; and it presents different degrees of density, and varies much in thickness, and extent of surface over which it is spread. In some cases, it consists of a tenacious mucus blended with a small proportion of fibrine; sometimes of a dense, albuminous concretion; and, again, it is found in the form of a thick adventitious membrane, extending from the epiglottis without breach of continuity to the extremities of the bronchial ramifications.*

3. With respect to the source of that peculiar exudation which is poured

out upon the inflamed mucous surfaces in croup, I have before expressed the opinion that it is an effusion from the diseased follicles of the tonsils, larynx, and trachea.

Anatomy has revealed to us that the tonsillary glands are composed, almost entirely, of an aggregated mass of follicles, enveloped in folds of the mucous membrane; that the lining membrane of the larynx is studded with mucous follicles, especially that portion of it which occupies the upper part of this organ. These glands indeed, are very numerous in the thickness of the superior vocal cords, within the ventricles of the larynx, and in the folds of the mucous membrane, in front of the arytenoid cartilages. The lining membrane of the trachea is supplied still more abundantly than that of the larynx with mucous cryptæ.

Now, it will be found, that wherever these glands are the most numerous in the air passages, there, *ceteris paribus*, will the albuminous exudation be the most abundantly poured out in the inflammation of croup, and the adventitious membrane will be the densest and the most perfectly formed.

The fluid secreted by the mucous follicles of the air-tubes, being intended to lubricate these passages, is, in the normal condition of the glands, bland and transparent, not abundant in quantity, and possesses no qualities of an acrid or adherent nature.

It consists, according to late microscopic observations, of water combined with a viscid substance, which is termed mucus, and which constitutes about five per cent of the whole amount.

When the mucous membrane of the larynx and trachea becomes the seat of the exudatory inflammation of croup, the glands which in health lubricate its surface, are now found, from some peculiarity of irritation, to elaborate a vitiated fluid, or a fibrinous exudation, which, sooner or later, if the disease continues, is changed into an adherent false membrane, having generally its greatest degree of thickness in the larynx and trachea, but becoming thinner as it descends towards the bifurcation."

The practical bearing of the facts stated in the following passage, will be obvious.

"In almost all the inflammatory affections of the air passages, whether primary or consecutive, the diseased action has its origin in the fauces and pharynx, and extends, by continuity, from thence to the respiratory tubes. This is especially true with regard to the origin and progress of the exudatory inflammation of croup. Here, the morbid action commences primarily about the fauces and the upper portion of the respiratory passage, and extends, universally, from above downwards. Dr. Porter, I am aware, observes in his work on the "Surgical Pathology of the Larynx and Trachea," the effusion of coagulated lymph is very generally confined to the larynx alone; but still, in a number of cases, the inflammation commences in the bronchial cells, and proceeds upwards in the windpipe. But this view of the course of exudative inflammation is not sustained by the observations of modern pathologists. Professor Rekitansky, who is undoubtedly one of the first pathologists of the age, says, that the exudative process progresses from the epiglottis downwards, extending in some instances to the very minutest branches of the bronchi; and the bronchial croup is a disease of youth and early manhood, and when occurring in the terminal branches of the bronchi, is always simultaneous with the pneumo-

nia, and consequently in such cases cannot be *true* croup. Prof Hasse also, whose late work on Pathological Anatomy has been translated and published by the London Sydenham Society, observes with regard to the exudatory inflammation of croup, that its progress is invariably from above downwards, and that it never spreads in the opposite direction. This law is so universal, that where plastic inflammation occurs in the bronchi of the adult, as the concomitant of pneumonia, it can only descend to the pulmonary cells, never mount to the larynx.

Let this important point, advanced in this last proposition, with reference to the pathology of the disease, be fully established, and universally understood by the profession, and it will be at once perceived what important results may follow the topical employment of appropriate remedial agents, in the early treatment of true inflammatory croup."

In regard to the treatment, Dr. G. remarks:

"In the treatment of croup with topical remedial measures, I have always employed a solution of the nitrate of silver, as, in my opinion, there is no known therapeutic agent which for safety, efficiency, and certainty of action, can compare with the crystals of the nitrate of silver, in the local treatment of laryngeal, tracheal, and bronchial affections.

In preparing the solution, the pure crystals should be employed, and not the fused or solid nitrate, as the latter is much more likely than are the crystals, to contain the nitrate of potash, or copper, or lead in combination. A solution of the crystals, of the strength of from two to four scruples of the salt to an ounce of distilled water, when applied freely to the mucous membrane, does not act, as has been supposed, by burning, or by a destruction of the textural matter. It forms, immediately an union with the albumen, and other secretions of the mucous lining; whilst it operates, at the same time, to produce a most favorable change in the vital action of the parts."

* * * * *

"In employing the nitrate of silver as a topical remedy in the treatment of diseases in young children, I have not deemed it prudent or necessary to use a solution of the caustic of the strength recommended by Bouchut or Guet. The former employed a solution in the proportions of one of the salt to three of water; the latter, in the treatment of membranous croup, made use of a still more concentrated solution; namely, equal parts of the nitrate of silver and distilled water. Ordinarily, I have applied in croup, a solution composed of from two scruples to a drachm of the salt, dissolved in one ounce of distilled water. A remedy of this strength I have applied freely to the fauces, pharynx, and into the larynx of young children, in a large number of cases during the last eight years, and in no single instance have I observed any indications of the danger of suffocation from its employment. On the contrary, I have repeatedly observed, and have once before remarked, that much less bronchial irritation is produced by the application of the nitrate of silver into the larynges of young children who are suffering from croup, than when it is introduced into those of adults who are affected by chronic diseases of the larynx.

In cauterizing the cavity of the larynx in the above disease in adults, I have advised on a former occasion, that the aperture of the glottis should not be passed until after the parts in the faucial and pharyngeal region had been prepared by having the solution applied for a few times to the pillars

of the fauces, the epiglottis, and about the opening of the glottis. Proceeding in this manner, it has been shown that the instrument may then be passed into the larynx without producing half the amount of that irritation which its introduction below the epiglottis would have awakened without these preparatory steps.

Happily, it is not necessary to take these precautionary measures before employing the topical remedy, in the treatment of croup in children;—for as we have seen, applications of the argentine solution of a proper strength may be employed without apprehension in these cases; and these applications should be made promptly to the tonsillary and pharyngeal regions, whenever the symptoms present indicate the commencement of the exudative inflammation in the mucous membrane of these parts.

The instrument which I have ordinarily employed for making direct medical applications to the fauces, and into the cavity of the larynx, in the topical treatment of croup, is one composed of whalebone, about ten inches in length, slightly curved at one end, to which curved extremity is securely attached a small round piece of fine sponge.

Care should be taken that the sponge be not only firmly fixed to the rod of whalebone, but that it be not of a size too large to pass the glottis. Anatomists are aware that there is but a very slight difference in size between the larynx of a child of two years, and twelve years of age; and that, at this period of life, the calibre of the tube is from three-eighths to half an inch in diameter; consequently, if the sponge be formed so as not to exceed one-third, or one-half an inch in diameter, it can be made, with slight pressure, to pass the aperture of the glottis, and to enter the laryngeal cavity.

The instrument being prepared, by suitably saturating the sponge with the solution to be applied, and the head of the child being firmly held by an assistant, and the base of the tongue depressed with a spoon, or any other suitable instrument, the operator carries the wet sponge quickly over the top of the epiglottis, and on the laryngeal face of this cartilage; then, pressing it suddenly downward and forwards, passes it through the opening of the glottis, into the laryngeal cavity. If any patches of false membrane are to be observed upon the pillars or tonsils, the sponge should be passed freely over these parts, and also upon the posterior wall of the pharynx.

Not unfrequently, if topical measures employed in the very onset of the disease, and before the exudative inflammation has extended much into the larynx, the affection may be arrested by one or two applications of the caustic solution to the fauces, and the opening of the glottis, without ever passing the instrument upon the mucous surfaces of the larynx."

* * * * *

"If we admit that the peculiar inflammation of croup has its origin, ordinarily, about the tonsils, and the opening of the air-tube, we can understand how readily the application of the nitrate of silver to the parts about the larynx, arrest the disease, if the topical remedy is employed in the commencement of the exudative process.

After the inflammation has advanced, and the surfaces of the larynx have become involved in the disease, and the argentine solution should not only be applied to the tonsils and to the faucial region generally, but the applications must be extended into the laryngeal cavity.

If the exudations are not already formed into adventitious membrane,

the employment of a few successive applications below the epiglottis may be sufficient to arrest the plastic inflammation altogether. But even in a more advanced stage of the disease, when, from its continuance, and the severity of the disease, we have reason to apprehend the formation of a false membrane or a "tubular mould," throughout the larynx and trachea, we should not despair of removing the obstruction or of arresting the inflammation."

* * * * *

"When called, therefore, to a case of croup in this its second or developed stage of the disease—and unfortunately, it is not until this period of the affection that medical aid is resorted to in a large proportion of the cases of croup—the local employment of the nitrate of silver, conjoined with other appropriate measures, should be entered upon at once.

An application may first be made to the tonsils, and about the opening of the glottis. After a delay of from fifteen minutes to an hour, the operation may be repeated, and the sponge wet with the solution should then be passed into the glottis. The cauterization may then be repeated once in two, four, or six hours, according to the effect produced, and the intensity of the disease.

When the symptoms indicate that the disease has extended into the tracheal divisions, or when the affection is complicated with inflammation of the bronchi, the applications should be repeated more frequently, in order that some of the solution may find its way over the mucous surface of the larynx and trachea into the bronchial divisions."

From these extracts, the reader will gather a pretty correct idea of Dr. G.'s views relative to the pathology and treatment of tracheitis. Several very instructive cases of the disease are detailed, in which topical treatment was successfully resorted to after other means had failed, and where, to all appearances, no treatment whatever would have succeeded. We can only, in conclusion, recommend this little work of Dr. Green, as a most valuable practical treatise; contributing as much to advance our treatment of croup, as his former publication did of laryngeal diseases.

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ART. IV.—*Case of common continued (Typhoid) Fever. Autopsy.* By the Editor.

The following case of fever is interesting, as presenting, in an unusually prominent degree, active delirium, which persisted through the whole career of the disease. In this respect it strikingly resembled the last of the series of cases reported for the Nov. No. of this Journal, in which an opportunity for autopsical examination could not be obtained. As we are able in this case, to present, in connection with the history, the appearances found after death, we have thought it worthy of being reported.

John Stellwagon, a German, aged twenty, having recently come to this country, of good habits, a carriage maker, entered the hospital of the

Sisters of Charity, Nov. 29, 1848. As he was wholly unacquainted with the English language, I was unable to obtain any account of his disease from his own lips. I learned from his friends, that he had been gradually becoming ill for a couple of weeks; that he had taken to his bed two days before his entrance; that he had been bled on the morning of the day he entered the hospital; that he had previously taken purgative medicine; and that he had manifested more or less aberration of mind for several days.

The first record of symptoms was made on the 30th. He was then (morning) tranquil; lying on back; countenance presenting nothing worthy of note; respiration normal; tongue coated and dry in centre; skin warm and dry; pulse 120, well developed; abdomen not distended; no eruption visible; no tenderness on pressure; no gurgling, but the latter symptom had been observed the previous evening by the resident pupil; no dejection since his entrance; does not appear prostrated; was not then thirsty, but had been so during the past night, asking very often for drink. No evidence of delirium was apparent during my morning visit. No disposition to somnolency. Surface of body presented moderate hyperæmia, leaving whiteness on pressure, which slowly disappeared.

Treatment:—

Pulv. Doveri, grs. v.

Pulv. Aromat. grs. ii.

every six hours. Sponge surface with lukewarm water, and allow cold water to be drank freely.

Dec. 1st. Says he is better. Expression of countenance wild. Was actively delirious through the night, as he had been during the preceding night, getting out of bed, and, if not closely guarded, attempting to get out of the window. Endeavors this morning frequently to get out of bed. Tongue much reddened; papillary eminences elevated, especially in the centre; somewhat dry; slightly furred. Pulse 136, less developed than yesterday. Two dejections occurred in bed during night. Abdomen slightly meteorized; no tenderness on pressure. Four or five rose spots counted on abdomen and chest. Some redness of cheeks. Eyes not injected; pupils unnaturally dilated; no evidences of undue sensitiveness to light. Temperature of head not relatively elevated.

R̄ S. Morphine, gr. $\frac{1}{4}$,
P. Camphoræ, grs. iv,
P. Sacch. Alb., grs. v,

every four or six hours, according to wakefulness or delirium.

He frequently attempted to get out of bed during my visit. He does not appear to understand the import of questions addressed to him; replying incoherently. Protrudes his tongue when requested.

P. M. Delirium continues; getting out of bed unless constantly watched. On one occasion, when attention was diverted from him for a few moments, he was found to have crept beneath the bed, apparently from terror. Talks incoherently; pulse very frequent; skin hot and dry; tongue dry; no sensitiveness to light; complains of no pain, and declares that he is perfectly well.

Treatment:—Emp. vesicat. to Nuchæ 6x3. Repeat morphia and camphor every three hours, if vigilance and active delirium continue. Cold applications to head, renewing very frequently. Thin milk porridge for diet.

Dec. 2nd. Active delirium continued through the night. No dejection. Passed urine freely. Mutters. Carphologia. Copious perspiration. Tongue moist. Protrudes it when requested. Pulse 160, small. Abdomen moderately tympanitic, no more rose spots visible. Takes drink readily. Respirations not accelerated.

Treatment continued, with addition of Madeira wine $\frac{3}{4}$ ss. hourly. P. M. Perspiring very copiously. Skin warm. Pulse so frequent as to be scarcely enumerated. Mutters incoherently. Occasionally sleeps for a few moments, and heavily. Countenance sunken. Protrudes his tongue readily, which is moist. Some sordes on teeth. Respirations 30. Abdomen not distended.

Carb. ammon. gra. v.

Aquæ Puræ $\frac{3}{4}$ ss. every two hours.

Brandy $\frac{3}{4}$ ss. every two hours.

Increase both brandy and ammonia if he continues to sink.

Died at 11 o'clock, P. M.

Autopsy twelve hours after Death. *Head.*—Moderate adhesion of dura mater. Arachnoid membrane diaphanous; a little serum beneath the membrane at dependent portion of brain. Some effusion at base of brain, quantity could not be estimated, being commingled with blood which escaped on removing the brain from the skull. Large veins between convolutions, congested. A considerable number of red points on section of cerebral substance. Ventricles empty. Consistence of brain's substance normal. *Chest.*—Slight, old adhesions over small space in right chest. Several ounces of sanguinolent effusion (say 5 or 6) in left chest. No adhesion in this chest; no lymph. Pleural membrane presented nothing to attract notice. Lungs on both sides free from morbid appearances, presenting the amount of hypostatic congestion generally found in autopsical examinations; crepitating throughout.

Heart.—Slight effusion of transparent serum. Organ rather below normal size. Left ventricle empty. Left auricle contained a small quantity of fluid blood. Right ventricle contained fluid blood, with some small, soft coagula. Right auricle moderately distended with blood, mostly fluid.

Abdomen.—Colon and cæcum greatly distended with gas; small intestines moderately so. Dividing the ileum close to the cæcum, and, lengthwise, for several feet upward, the glands of Peyer were found to be enlarged, projecting two or three lines above the surface of the surrounding mucus membrane. From fifteen to twenty patches were counted, the enlargement diminishing, progressively, upward. No ulcerations, nor discoloration, perceptible. Mucus surface appeared healthy. Numerous enlarged solitary glands visible, some as large as small peas. Mesenteric glands, in portions of mesentery corresponding to diseased glands of Peyer, greatly enlarged. At lower portion of ileum they were as large as filberts; their enlargement was less and less, in correspondence with diminution of disease of Peyer's glands upward, and they ceased to be visible at a point corresponding to the limit of the latter. On section of the Mesenteric glands, some presented red, and some white color; none were found to contain pus or other fluid.

Stomach.—Presented punctated redness, or ecchymoses. No capilliform redness. Size normal. Mucus membrane softened. Several ulcerations varying in size and form; the largest half an inch in length, and three or four lines in width, superficial, apparently having penetrated only the mucus coat. These appearances were limited to the larger curvature. The organ at this part was easily torn, a rent occurring in removing it from its vascular splenic attachments.

Spleen somewhat enlarged, but not softened.

Liver congested. Otherwise normal.

Remarks.—The history of the foregoing case shows a predominance and persistence of active delirious excitement, which is not common in cases of continued fever in this region. The intestinal lesions furnished a fine exemplification of those which are regarded by Louis, and others, as constituting the "*anatomical characteristic*" of typhoid fever, as distinguished from typhus. The non-softening of the spleen was exceptional to the general rule. The pathological condition of the stomach is to be regarded as an accidental element of the case. The chief point of interest relates to the absence of evidences of inflammation in the encephalic structures, considered in connection with the cerebral symptoms during life.

Dec. 1848.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Hospitals.—The following historical sketch of the institution of hospitals, and other establishments of charity, is copied from the *Buffalo Daily Commercial Advertiser*, and will, we think, be perused with interest by our readers.—EDITOR.

Hospitals—Establishments of Charity.—No ancient legislator ever proposed a hospital for the poor and infirm, or a hospital for the strangers and destitute. When peasants, or any wanderers from the country, came into Rome, if they did not leave it after the market, they had no resource but to pass the night in the Arcades, and about the forum, or in the porches before the temples. The Greeks were ignorant even of the name of an hospital; the word "nosocomium" was first employed by St. Jerome and St. Isidore. It is true in the pyritaneum at Athens, there was provided subsistence for the wives and children of those who had suffered for their country; but there was no asylum in sickness.

The infirm and sick are wholly overlooked in the institutions of Lycurgus, as in those of all other legislators of Greece, although the Father of Medicine, Hippocrates, with a solemn oath, swears that he will visit all his life the poor gratuitously.

In ancient Rome there was the same neglect and indifference in regard to the poor. Numa made no provision for them; and during the Republic the bounties of the state were given only to those who were in health. The Emperors were not more humane, though it is true certain baths, or thermæ, were consecrated to the use of the people. The rich used to give daily to their poor clients the sportula, of which Juvenal speaks so often; but there was no public asylum for the poor, and in sickness they were left to expire beneath their own miserable tiles, which afforded no shelter from sun or rain. The slaves were left unburied; so that Horace speaks of the Esquiline hill as whitened by the number of bones collected by carnivorous birds. Cato, whom Plutarch remarks for living familiarly with his slaves as companions in the labors of husbandry, never thought of providing for them in sickness or old age; and in his book of instructions, *De Re Rustica*, he prescribes, as an important point of domestic economy, to sell off old slaves, in order not to nourish, he says, useless persons. Neither the religion nor the philosophy of Greece and Rome tended to comfort the poor. The divinities were cruel; the Stoic affected to despise the sufferings of the indigent; the Epicurean took no thought of them. In this respect Paganism was every where the same. Throughout the vast regions of Mogul, India, and China, the use of hospitals is unknown to this day. In no country did Christianity find such institutions existing.

In respect to institutions of mercy, all countries which had not beheld

the light of faith were equally destitute. It seems unaccountable, therefore, that so grave an historian as Niebuhr, should seize the occasion, when speaking of building the Latin hospital, in the twelfth century, to denominate that epoch, the midnight of barbarism at Rome. Truly, it was a blessed night which beheld such foundations, even though their walls may have been built with fragments of statues, and other works of Grecian art. The history of their rise and progress can be traced in a few words. In the year 380, the first hospital in the West was founded by Fabiola, a devout Roman lady, without the walls of Rome. St. Jerome says, expressly, that this was the first of all. And he adds, "That it was a country house destined to receive the sick and infirm, who before used to lie stretched on the public way." The Pilgrim's hospital at Rome, built by Cammachius, became also celebrated. In 330, the priest Zoticus, who had followed Constantine to Byzantium, established in that city, under his protection, a hospice for strangers and pilgrims. The house was built on the plan of the hospice at Jerusalem, which Hircan had erected there one hundred and fifty years before Christ, in expiation for having opened and plundered the tomb of David, and in order to convert the riches he had found there to a benevolent purpose; but it is supposed by Monges that this hospital was only open during the feast of the passover. St. Isidore says, in his Etymologies, "That this was the first hospice for strangers." St. Basil, who founded the first hospitals of Asia, mentions a house for the reception of the sick and of travellers, built on a spot formerly uninhabited, near the city of Cesarea, which became afterwards the ornament of the country and like a second city. St. Basil used frequently to visit it, in order to instruct and console the poor. St. Chrysostom built several hospitals at Constantinople. Justinian, in the year 350, erected at Jerusalem the famous hospital of St. John; and his example was followed by his successors with such zeal, that according to Ducange, in his commentary on the Byzantine History, there were thirty-five establishments of charity in that city alone: there was the Nosocomium, or asylum for the sick; the Xenodochium, for pilgrims and strangers; the Ctochium, or hospice for the poor; the Brepheotrophium, or house of education for poor children; the Orphanotrophium, or house for orphans; the Gerocomium, or asylum for the aged; the Candochreum, or gratuitous inn; and the Morotrophium, or house for lunatics.

St. Augustin says, "that hospitals have their origin in the truth of religion." In a material sense, too, they owed their existence to the ministers of religion; for, in fact, the first hospitals were the bishops' houses. But as the Episcopal resources proved insufficient, the church decreed that the canons should give the tenth of their revenues and oblations, to maintain the sick poor. In early times the hospitals were always under the direction of priests; thus St. Isidore presided over that at Alexandria, in the time of the Patriarch Theophilus. It was determined by Charlemagne, 816, that at each see one of the canons should always govern the hospital, and that this asylum should be everywhere near the cathedral, in order that the clergy might easily visit it. The consequence of this early discipline can be seen at Paris, where the Hotel Dieu is in the place before the cathedral, and at Brussels, where the great hospital adjoins the church of St. John, which is one of the oldest in that city. Lanfranc, and many other great English prelates, are recorded to have signalized the first year of their piscopacy by erecting houses for the reception of the sick.

To the Editor of the Boston Medical and Surgical Journal.
Passage of an Iron Rod through the Head.

DEAR SIR,—Having been interested in the reading of the cases of "Injuries of the Head," reported in your Journal by Professor Shipman, of Cortlandville, N. Y., I am induced to offer you the notes of a very severe, singular, and, so far as the result is taken into account, hitherto unparalleled case, of that class of injuries, which has recently fallen under my own care. The accident happened in this town, upon the line of the Rutland and Burlington Rail Road, on the 13th of Sept. last, at 4½ o'clock, P. M. The subject of it is Phineas P. Gage, a foreman, engaged in building the road, 25 years of age, of middle stature, vigorous physical organization, temperate habits, and possessed of considerable energy of character.

It appears from his own account, and that of the by-standers, that he was engaged in charging a hole, preparatory to blasting. He had turned in the powder, and was in the act of tamping it slightly before pouring on the sand. He had struck the powder, and while about to strike it again, turned his head to look after his men (who were working within a few feet of him,) when the tamping iron came in contact with the rock, and the powder exploded, driving the iron against the left side of the face, immediately anterior to the angle of the inferior maxillary bone. Taking a direction upward and backward toward the median line, it penetrated the integuments, the masseter and temporal muscles, passed under the zygomatic arch, and (probably) fracturing the temporal portion of the sphenoid bone, and the floor of the orbit of the left eye, entered the cranium, passing through the anterior left lobe of the cerebrum, and made its exit in the median line, at the junction of the coronal and sagittal sutures, lacerating the longitudinal sinus, fracturing the parietal and frontal bones extensively, breaking up considerable portions of brain, and protruding the globe of the left eye from its socket, by nearly one half its diameter. The tamping iron is round, and rendered comparatively smooth by use. It is pointed at the end which entered first, and is three feet, seven inches in length, one and one quarter inch in diameter, and weighs 13½ pounds. I am informed that the patient was thrown upon his back, and gave a few convulsive motions of the extremities, but spoke in a few minutes. His men (with whom he was a great favorite) took him in their arms and carried him to the road, only a few rods distant, and sat him into an ox cart, in which he rode, sitting erect, full three quarters of a mile, to the hotel of Mr. Joseph Adams, in this village. He got out of the cart himself, and with a little assistance walked up a long flight of stairs, into the hall, where he was dressed.

Being absent, I did not arrive at the scene of the accident until near 6 o'clock, P. M. You will excuse me for remarking here, that the picture presented was, to one unaccustomed to military surgery, truly terrific; but the patient bore his sufferings with the most heroic firmness. He recognized me at once, and said he hoped he was not much hurt. He seemed to be perfectly conscious, but was getting exhausted from the hemorrhage, which was very profuse both externally and internally, the blood finding its way into the stomach, which rejected it as often as every fifteen or twenty minutes. Pulse 60, and regular. His person, and the bed on which he was laid, were literally one gore of blood. Assisted by my friend, Dr.

Williams, of Proctorsville, who was first called to the patient, we proceeded to dress the wounds. From their appearance, the fragments of bone being uplifted and the brain protruding, it was evident that the fracture was occasioned by some force acting from below upward. The scalp was shaven, the coagula removed, together with three small triangular pieces of the cranium, and in searching to ascertain if there were other foreign bodies there, I passed in the index finger its whole length, without the least resistance, in the direction of the wound in the cheek, which received the other finger in like manner. A portion of the anterior superior angle of each parietal bone, and a semi-circular piece of the frontal bone, were fractured, leaving a circular opening of about $3\frac{1}{2}$ inches in diameter. This examination, and the appearance of the iron, which was found some rods distant, smeared with brain, together with the testimony of the workmen, and of the patient himself, who was still sufficiently conscious to say that "the iron struck his head and passed through," was considered at the time sufficiently conclusive to show not only the nature of the accident, but the manner in which it occurred.

I have been asked why I did not pass a probe through the entire extent of the wound at the time. I think no surgeon of discretion would have upheld me in the trial of such a foolhardy experiment, in the risk of disturbing lacerated vessels, from which the hemorrhage was near being staunched, and thereby rupturing the attenuated thread, by which the sufferer still held to life. You will excuse me for being thus particular, inasmuch as I am aware that the nature of the injury has been seriously questioned by many medical men for whom I entertain a very high respect.

The spiculæ of bone having been taken away, a portion of the brain, which hung by a pedicle, was removed, the larger pieces of bone replaced, the lacerated scalp was brought together as nearly as possible, and retained by adhesive straps, excepting at the posterior angle, and over this a simple dressing—compress, night cap and roller. The wound in the face was left patulous, covered only by a simple dressing. The hands and fore arms were both deeply burned nearly to the elbows, which were dressed, and the patient was left with the head elevated, and the attendants requested to keep him in that position.

10, P. M., same evening.—The dressings are saturated with blood, but the hemorrhage appears to be abating. Has vomited twice only since being dressed. Sensorial powers remain as yet unimpaired. Says he does not wish to see his friends, as he shall be at work in a day or two. Tells where they live, their names, &c. Pulse 65; constant agitation of the lower extremities.

14th, 7, A. M.—Has slept some; appears to be in pain; speaks with difficulty; tumefaction of face considerable, and increasing; pulse 70; knows his friends, and is rational. Asks who is foreman in his pit. Hemorrhage internally continues slightly. Has not vomited since 12, M.

15th, 9 A. M.—Has slept well half the night. Sees objects indistinctly with the left eye, when the lids are separated. Hemorrhage has ceased. Pulse 75.

8, P. M., same day.—Restless and delirious; talks much, but disconnected and incoherent. Pulse 84, and full. Prescribed *vin. colchicum*, *f 3ss*, every six hours, until it purges him. Removed the night-cap.

16th, 8, A. M.—Patient appears more quiet. Pulse 70. Dressed the

wounds, which in the head have a fetid sero-purulent discharge, with particles of brain intermingled. No discharge from bowels. Ordered sulph. magnesia, $\mathfrak{z}\text{j}$., repeated every four hours until it operates. Iced water to the head and eye. A fungus appears at the external canthus of the left eye. Says "the left side of his head is banked up."

17th, 8, A. M.—Pulse 84. Purged freely. Rational, and knows friends. Discharge from the brain profuse, very fetid and sanious. Wound in face healing.

18th, 9, A. M.—Slept well all night, and lies upon his right side. Pulse 72; tongue red and dry; breath fetid. Removed the dressings, and passed a probe to the base of the cranium, without giving pain. Ordered a cathartic, which operated freely. Cold to the head. Patient says he shall recover. He is delirious, with lucid intervals.

19th, 8, P. M.—Has been very restless during the day; skin hot and dry; tongue red; excessive thirst; delirious, talking incoherently with himself, and directing his men.

20th and 21st.—Has remained much the same.

22nd, 8, A. M.—Patient has had a very restless night. Throws his hands and feet about, and tries to get out of bed. Head hot. Says "he shall not live long so." Ordered a cathartic of calomel and rhubarb, to be followed by castor oil, if it does not operate in six hours.

4, P. M. same day.—Purged freely twice, and inclines to sleep.

23d.—Rested well most of the night, and appears stronger and more rational. Pulse 80. Shaved the scalp a second time, and brought the edges of the wound in position, the previous edges having sloughed away. Discharge less in quantity and less fetid. Loss of vision of left eye.

From this time until the 3d of October, he lay in a semi-comatose state, seldom speaking unless spoken to, and then answering only in monosyllables. During this period, fungi started from the brain, and increased rapidly from the orbit. To these were applied nitrate of silver cryst., and cold to the head generally. The dressings were renewed three times in every twenty-four hours; and in addition to this, laxatives, combined with an occasional dose of calomel, constituted the treatment. The pulse varied from 70 to 96—generally very soft. During this time an abscess formed under the frontalis muscle, which was opened on the 27th, and has been very difficult to heal. Discharged nearly $\mathfrak{z}\text{viii}$. at the time it was punctured.

Oct. 5th and 6th.—Patient improving. Discharge from the wound and sinus, laudable pus. Calls for his pants and wishes to get out of bed, though he is unable to raise his head from the pillow.

7th.—Has succeeded in raising himself up, and took one step to his chair, and sat about five minutes.

11th.—Pulse 72. Intellectual faculties brightening. When I asked him how long since he was injured, he replied, "four weeks this afternoon, at 4½ o'clock." Relates the manner in which it occurred, and how he came to the house. He keeps the day of the week and time of day, in his mind. Says he knows more than half of those who inquire after him. Does not estimate size or money accurately, though he has memory as perfect as ever. He would not take \$1000 for a few pebbles which he took from an ancient river bed where he was at work. The fungus is giving way under the use of the crys. nitrate of silver. During all of this time there has been a discharge of pus into the fauces, a

part of which passed into the stomach, the remainder being ejected from the mouth.

20th.—Improving. Gets out and into bed with but little assistance. Sits up thirty minutes twice in twenty-four hours. Is very childish; wishes to go home to Lebanon, N. H. The wound in the scalp is healing rapidly.

Nov. 8th.—Improving in every particular, and sits up most of the time during the day. Appetite good, though he is still kept upon a low diet. Pulse 65. Sleeps well, and says he has no pain in the head. Food digests easily, bowels regular, and nutrition is going on well. The sinus under the frontalis muscle has nearly healed. He walks up and down stairs, and about the house, into the piazza, and I am informed this evening that he has been in the street to-day.—I leave him for a week, with strict injunctions to avoid excitement and exposure.

15.—I learn, on enquiry, that Gage has been in the street every day except Sunday, during my absence. His desire to be out and to go home to Lebanon has been uncontrollable by his friends, and he has been making arrangements to that effect. Yesterday he walked half a mile, and purchased some small articles at the store. The atmosphere was cold and damp, the ground wet, and he went without an overcoat, and with thin boots. He got wet feet and a chill. I find him in bed, depressed and very irritable. Hot and dry skin; thirst; tongue coated; pulse 110; lancinating pain in left side of head and face; rigors, and bowels constipated. Ordered cold to the head and face, and a black dose to be repeated in six hours, if it does not operate. He has had spiculae of bone pass into the fauces, which he expelled from the mouth within a few days.

16th, A. M.—No better. Cathartic has operated freely. Pulse 120; skin hot and dry; thirst and pain remain the same. Has been very restless during the night. Venesection f 3xvj. Ordered calomel, grs. x, and ipecac. grs. ij, followed in four hours by castor oil.

8, P. M., same day.—Purged freely; pulse less frequent; pain in head moderated; skin moist. R Antim. et potassa tart, grs. iij.; syr. simplex, f 3vj. Dose a dessert spoonful every four hours.

17th.—Improving. Expresses himself as "feeling better in every respect;" has no pain in the head.

18th.—Is walking about house again; says he feels no pain in the head, and appears to be in a way of recovering if he can be controlled.

At this date I shall leave the case at present. The result, and a few remarks of a practical nature, together with the mental manifestations of the patient, I reserve for a future communication. I think the case presents one fact of great interest to the practical surgeon, and, taken as a whole, is exceedingly interesting to the enlightened physiologist and intellectual philosopher. In my effort to be brief, which I fear you will think an utter failure, I have omitted much in my notes that might interest some readers. Allow me to say here, that I have seen a communication in "The Reflector and Watchman," stating that "there is a piece of bone loose in the top of his head, as large as a dollar, which will have to be removed, should he live." The fractured portions of bone, excepting those which were removed at the first dressing, have united firmly, and the above remark was made unadvisedly. Should you think these notes of sufficient importance to deserve a place in your Journal, they are at your service.

Yours, very respectfully,

CAVENDISH, VT., Nov. 27, 1848.

J. M. HARLOW.

Hydrophobia treated with Chloroform.—A case of hydrophobia, treated unsuccessfully with Chloroform, is reported in the American Journal of the Medical Sciences, by Dr. Hartshorne.

The boy was thirteen years old. Was taken sick about six weeks after being bitten by a dog proved to behave as if rabid. Had high fever, which had no remission, and yet no characteristic of typhus or typhoid fever; he was not deaf; had no tympanitis; no petechia; but had throughout, excessive sensibility to impressions, particularly those of cold, and about the face; had a difficulty, at times incapability, of swallowing, caused by a spasm which made a violent respiration simultaneous with the attempt to swallow, and thus impeded the latter and endangered the passage of liquid into the windpipe; which symptom was constant, and belongs to no ordinary type of disease; had injections of laudanum, 3ss or 3j, repeated again and again with no effect: and breathed chloroform for hours, with only short intermissions, with no more effect than to tranquilize him, and produce natural sleep, from which he was, once at least, roused by a return of wild delirium: and yet had no sign whatever of tetanus: no possibility of mania-a-potu: and very little and only occasional complaint of pain: which pain, when it occurred, except in the first stage, was in the arm which had been bitten by the dog; had also salivation, constant watering of the eyes, and finally vomiting: and whose delirium was, until quelled, of a malicious and furious character, or one of dread, horror, and distress: ending fatally at the end of the seventh day.

What name should be given to such a case? "Hydrophobia" is not appropriate, because in this and other cases they *desire* drink, but are incapable of benefiting by it: would not *dyspotia*, or rabies dyspotia be more correct?

It is a highly important fact, that the inhalation of chloroform, persevered in at intervals, did master the violent delirium and horror of the case. Dr. Smiley, of Philadelphia, and Dr. Stone of Easton, have already noticed the same effect; although their cases also were fatal. This removes, at least one element of evil from the disease. And if any remedial agency can ever give hope of *cure*, it must be, when aided by other means, one which has such control over the symptoms, attained hitherto by no other medicine.

We were deterred from depletion by the lancet by the supposed analogy to tetanus, in which stimulation is mostly requisite and useful. But free bleeding is said to have effected one or two recoveries; and has *a priori* plausibility in its favor, as the disease is inflammatory both in symptoms and postmortem appearances. We were unwilling to use counter irritation to the spine, from the idea that death was certain, that those means only were, therefore, justifiable, which lessened or did not increase suffering. And the early resort to chloroform was prevented by respect for the doubts of those who at first were inclined to regard it as a case of fever.

With a distinct diagnosis, should another case present, in recollection of the mitigation already obtained—would not the practitioner be justified in commencing with venesection; using chloroform, with discretion, from an early period; and applying some powerful revulsive, aided by a narcotic, to the nucha? Dr. R. S. Wodrop proposed vesication, followed by the free application of a salt of morphia. Perhaps *acupuncture with aconitia*

might prove more powerful. This treatment has been found successful in obstinate neuralgia. I used a sort of cataplasm of tinct. rad. aconit. to the above case. An excessive sensitiveness to incident impressions, and consequently excessive motory action of particular muscles, *including the diaphragm* obviously in the case, as well as those of the throat, seems to present. Remedies which lessen sensation are the ones, then, which may mitigate the disorder at least. In France, the vapor bath is asserted to have wrought a cure; its efficacy should be tried, and might be aided, as was contemplated in our case, by medication with such articles as tobacco, chloroform, acnrite, to produce a powerfully antispasmodic fumigation of the whole surface of the body. Prof. S. Jackson advised bathing in warm oil. When swallowing is impossible, the stomach tube might be inserted through the nostril, as done by Dr. Joseph Hartshorne, a number of years since, in the hospital; and life also supported by nutritious enemata.

But careful reflection will only deeply impress the conclusion, that with all the means that man can devise, the malady is one which affords less hope of cure, decidedly, than phthisis; and that prevention by immediate excision (or cauterization?) of the bitten part, is the only safeguard against its result.—*Western Jour. of Med.*

Re-Vaccinations in the Prussian Army in 1847.—The total number of men vaccinated was 43,264; the number of those who bore marks of a former vaccination in a decided manner, 34,264; ditto with the marks not very distinct, 6,405; ditto with marks not visible at all, 2,927. The vaccine virus developed itself satisfactorily in 25,544; very irregularly in 7,425; and not at all in 10,527. The vaccinations which had yielded no results were repeated; they acted in 2,718; and failed entirely in 8,952 cases. In consequence of the present vaccination, there were developed from one to five vaccine pustules upon 13,295; from six to ten upon 8,164; from eleven to twenty upon 5,767; from twenty-one to thirty upon 1,036 of the men. Amongst those who were vaccinated in the year 1847, there was within the same year, no case of varicella, none of actual small-pox, and only one of chicken-pox. The lymph was obtained from vaccinated children or grown-up persons. It is remarkable that amongst those who were subject to re-vaccination there were several who had had the small-pox before, yet upon whom the vaccine matter produced the usual pustules.—*Lancet.*

Larvæ of Flies ejected from the Stomach. MR. EDITOR,—The two creatures enclosed in this little box were thrown from a man's stomach, four weeks since, in the act of vomiting. The man is represented to be of "middle age," of a hardy, robust constitution, and in his ordinary health. Although not an intemperate man, in the usual acception of the term, yet he occasionally drank a little spirit, and it was "immediately after drinking a tumbler of hot gin sling," that he was taken with nausea and vomiting, and threw up these animals, if animals they be. The have been kept during the four weeks in a dry pill-box made of pasteboard, and yet one of them is still *alive and kicking.* I have transferred them to

another box, and protected them with a lock of moist cotton to secure them from harm on their way to Boston. They were presented me by Dr. Grant, of Ossipee, a member of our Legislature now in session in this town, who will be pleased to answer any inquiries respecting the case. If the little one should be as active when you obtain him as he is now, I think you will consider him, as I certainly do, a queer fish to be derived from such a source.

Very respectfully,

Concord, N. H., Dec. 4th, 184.

THO. CHADBOURNE.

Immediately on the receipt of the box containing the larvæ, one of which was alive, we called on Augustus A. Gould, M. D., the distinguished entomologist, for his opinion in regard to them—and he has kindly sent us the following note.—Ed.

DEAR SIR,—The animals you left with me are larvæ of a large fly (*syrphus*?), which live in the water. They are familiarly called *rat-tailed worms*. The rings of the tail are constructed to push out, like the joints of a telescope, so as to reach the surface of the water, and thus accommodate themselves to different depths. Through this tube they draw in air, and the end is protected by a circlet of hairs to prevent foreign substances from entering the tube.

Respectfully,

Boston, Dec. 6th, 1848.

AUGUSTUS A. GOULD.

Bost. Med. and Sur. Jour.

Nitrate of Lead as a Disinfecting Agent.—Nitrate of lead has been employed recently in the Com. Hospital of this city, as a disinfecting agent, and the experiments thus far made, promise the most satisfactory results. The power of this article to correct the odor arising from decomposing morbid specimens, was accidentally noticed by Dr. Cary, resident physician at the Commercial Hospital; and taking advantage of this discovery, he employed it for the purpose of removing the odor of alvine discharges, offensive pyalism, &c., with the most complete success. It entirely removes the odor of decomposing animal substances, alvine excretions, sloughing or offensive ulcers, and may doubtless be made a valuable agent in the treatment of any disease requiring such an agent. It is entirely soluble in water, and possesses astringent properties, similar to the acetate of lead.

It may be used in the proportion of thirty to one hundred grains to the ounce of water. Dr. Cary is still experimenting with the agent, and promises to report the results for publication in the *Lancet*.

Professor Mussey has frequently used nitrate of lead, as an application to offensive ulcers.—*Western Lancet*.

Cholera in Granite Regions.—Dr. C. T. Jackson, of Boston, distinguished for his scientific acquirements, publishes recently an opinion that the cholera will not fasten upon New England, or rather in this section of the country, as the disease never has been very destructive in granite regions. His arguments are philosophical; yet it will be recollected that the disease once appeared here, and the apprehensions of its second appearance, to an equal extent, at least, are well grounded. According to Dr. Jackson's

views, in those sections where lime is found, the cholera has invariably exhibited its most deadly activity, and it is in such regions alone that the greatest danger in this country is to be apprehended.

Although the municipal authorities seem to be making some preparation for the reception of the pestilence at different Atlantic points, all experience proves that those defensive measures, which relate only to importation of the disease, are utterly worthless. Cholera cannot be kept at bay, or turned from its course. Neither does dieting in any particular manner render the individual less liable to contract the disease, or lessen its violence when developed, if credit is to be placed in the history of this remarkable pestilence. But this circumstance should not operate to prevent public bodies and municipalities from abating nuisances, and bettering the condition of the poor in those plague spots which are found in every city, and town of magnitude, in which a certain class of people, invariably establish themselves.—*Boston Medical and Surgical Journal*.

Influence of Russian Vapor-baths on the Cholera.—Of all the means employed against cholera, one of them from which the most efficacy is derived, is the vapor-bath. In some cases it has produced the most advantageous results in Russia, where its use is more generally adopted than in our climate. In the report of the medical commission, sent to Petersburg in 1830, we see that in the hospital of the hemp merchants, which contains all the materials for vapor-baths, out of forty cholera patients submitted to that treatment, six only died. Dr. Minchowsky, chief physician to the establishment, having, at the request of Drs. Barry and Russell, heated and fitted up the baths with vapor, as in the case of receiving patients for the cholera, two servants belonging to the hospital were sent with a thermometer, for the purpose of measuring the degree of heat. In the space of three minutes, the thermometer mounted, in the most elevated part of the building, to 46° Reaumur's scale, and in seven minutes it rose, upon the bench where the patients were placed, to 58° 12. Dr. Minchowsky, when a patient was brought in suffering under a severe effect of frost, placed him in the bath extended on the bench, and, after rubbing him with divers substances, applied the vapor of water and vinegar, until the circulation was restored, or until all hope of saving life had vanished. A patient who was at the last extremity, after being three hours in the vapor-bath at the high temperature, was restored to life. One of the physicians belonging to the commission, gives an interesting description of the vapor-baths in Russia, and the sensations he experienced, when he tried the effects on his own person.—*Med. Times*.

Chloroform in Cholera.—Mrs. Smith, aged fifty-five, of bilious temperament, prone to diarrhoea, was on Monday last seized with all the symptoms of an attack of English cholera—vomiting, purging, excessive spasm of body and extremities, small rapid pulse, and insatiable thirst. The dejections were of a frothy character, resembling yeast, and the matter rejected from the stomach of the same nature. Recourse was had to the usual remedies prescribed in this disease, with strong terebinthinate stupes to the abdomen and calves of the legs, and injunctions given as to diet, &c. Having attended her before for like symptoms, I prognosticated a favorable

and speedy result. About three o'clock on the following morning, I was hastily aroused by her husband, as the patient had become much worse. All her symptoms had increased to an alarming degree; the spasm was universal and excessively violent, "as if knots were being tied in her bowels;" vomiting incessant; countenance livid and cold; articulation feeble, praying to be released from her sufferings. As all the medicines had been rejected, I thought it fruitless to continue them, but at once decided upon administering chloroform. A mixture composed of the following was prescribed:—

R. Chloroform, gr. xvi; aquæ vitæ (cogn.), ℥j.; aquæ destil., ad ℥vj. M.

A fourth part was given immediately, which had a partial but most satisfactory effect: an abatement of all her symptoms was the immediate consequence. In two hours a disposition to recurrence manifested itself, when a second dose of the mixture was administered, which entirely controlled all spasms, vomiting, and purging. She expressed herself "very comfortable," and fell into a quiet sleep. At nine o'clock I again saw her, and found her suffering only from some febrile symptoms, accompanied with much exhaustion. She was ordered cold rice and mucilaginous drinks, and had the chalk mixture with nitric ether prescribed. A dose of ox-gall (gr. x) was given in the course of the day, which produced three bilious evacuations and some disposition to vomiting, which soon passed away. In two days she was declared convalescent. In 1832, when the cholera visited this place, my patient was attacked, but she declares her sufferings then were nothing in comparison with her late disorder. The two remaining doses of the chloroform mixture were ordered to be carefully preserved in case she had any return of her symptoms. A daughter, grown up, who had assiduously attended upon her mother, was on Wednesday evening seized in precisely a like manner, except that the dejections were more abundant and frequent; and the mother, without hesitation or appeal for advice, gave her the two remaining doses of the mixture. The same magic result followed; the first dose was only partial in its effect, but the second completely subdued the disease. When I called on Thursday, the gratifying announcement was made to me of the success of my medicine in a second case.

Perhaps I am not justified in calling these decided cases of Asiatic cholera, but the disease in its latter stage, in the case of the mother, assumed a much more severe type than our English form usually bears.

Without offering any remarks upon the *fons et origo* of the malady in its worst form, and with prospective fears for its soon visiting our shores, I am but too happy (in conjunction with Mr. Brady) in being able to report so favorably of a remedy which I believe only requires to be more extensively tested to be appreciated.—*London Med. Times.*

The following interesting extract is taken from a letter of T. L. Papin, M. D., one of the élèves of the University of St. Louis, now in Paris, to Dr. Pope.

"In the dressings made by M. Boudens, simple cerate and poultices are as little used as possible, and in their stead, cold water irrigations or direct application of pounded ice in bladders, over the wound, is used. This treatment appears to me the more rational; certainly the result is nearly

magical in many cases. One very satisfactory consequence of this dressing is, that you are never bothered by those excessive suppurations which large quantities of charpie and poultices will almost always bring on, and by means of which, the patients life is literally drained off.

Jobert, at the Hospital St. Louis, has a very summary way of stopping excessive suppuration of an amputated limb. He washes the stump as clean as possible, and then cauterizes it very thoroughly and deeply with the solid nitrate of silver. I have seen this used in one case with very satisfactory result. There is a surgeon, (whose name I cannot remember, and who practices in one of the provincial cities,) who uses the actual cautery in these cases, with great success. He published an article on this subject some weeks ago, in one of the Paris medical papers, giving an account of his experience in this matter, and calling on the surgeons of Paris to try it; but as he belongs to the medical school of Montpellier, of course no surgeon of Paris will try it for fear that it might succeed. By-the-way, this same actual cautery is very much and very successfully used by Jobert and Gendrin in ulceration of the neck of the womb.

I have seen a great deal of that dreadful complication of wounds: I mean traumatic erysipelas. Blandin and Jobert seem to succeed best in combating this very frequent and very fatal complication. The first uses leeches in large quantities just around the erysipelatous surface and along the course of the lymphatics which go from the inflamed part to the trunk; and the second dresses the inflamed surface and about an inch beyond it, with a very strong solution or ointment of the nitrate of silver. I may say here what I should have said before:—Baudens seldom has, with his ice and cold water dressings, to combat traumatic erysipelas. As for the solution of sulphate of iron, recommended and used by Velpeau in these cases, I have not seen as good results from it as had been led to expect. It is at best, an harmless remedy, and very objectionable, on account of its spoiling all the patients clothes and bedding, in spite of the precautions which may be taken to prevent it.

One word more, before I close this letter, on the appearance of the holes made by balls from fire-arms in the fleshy parts. Druitt says, (and I believe that many American surgeons teach the same thing,) "that when a musket ball has penetrated a fleshy part, there is seen a hole, perhaps rather smaller than the ball itself, with its edge livid and inverted; and if the ball have passed completely through, there will be another, *larger* and more ragged orifice, with its edge everted." Now, in over a hundred cases which I have noted down, which have been pointed out to the class in my presence by Velpeau, Roux, Blandin, Michou, Laugier, Jobert, Robert, Boyer, and Baudens, have always and invariably seen the following to be the true appearance of both orifices, viz: when a ball had penetrated into a fleshy part, it made a hole fully as large as the ball itself, the edge being smooth and round, and of a livid color; and if the ball had come out, the opening which it made at coming out was *twice and sometimes three times smaller* than the orifice by which it had entered the flesh. The shape of this second orifice was generally ragged, but in several cases, it had the exact appearance of a clean cut, half an inch long made by a surgeon's bistoury; so much so, in fact, that I have heard Blandin, Velpeau, and others, repeatedly ask these patients whether the balls had not been cut out by some one, but the invariable answer was that they had not.

I had the pleasure of meeting Professor Horner, of Philadelphia, in M. Roux's service at Hotel Dieu, and had a conversation with him on this subject, after having pointed out to him several cases which presented themselves to our notice. He says that this error of the English and American surgeons arose from experiments which were made by Sir Charles Bell, who shot a pistol at a pine board, and on examining the board, he found that the orifice of entry was indeed much smaller than the other, and hence the conclusion that it must be the same thing when a ball passes through human flesh, instead of a pine board.

I fear that this long letter will prove a bore to you, my dear Doctor, but you asked me for something new in surgery, and I send you what has interested me the most, hoping that it may prove of some interest to you, also."—*St. Louis. Med. and Surg. Jour.*

British Provincial Medical and Surgical Association.—Professor Wood, of Philadelphia, attended the meeting of this Association at Bath, in August last, in behalf of the American Medical Association, and on being toasted, delivered the following address:

"Mr. Chairman and gentlemen: It is with emotions, that, I fear, may prevent the expression of all I feel on this occasion, that I rise to thank the present company for the honor they have done me, and more especially for the honor they have done my country through me. (*Cheers.*) Science, sir, is universal—it is born of the necessities of our nature, and its objects are to promote the good of mankind; and therefore, its cultivators in every clime ought to be brethren. (*Hear, hear.*) If it be true of the great system of science, that by strong attraction, all parts are kept together, it is still more so in its inferior or subordinate relations. Like the planets of the solar system, though constituting a great mass of the stupendous whole, there is a closer affinity to each other than to other parts; so we, as scientific men, have a connexion, but as medical men, we are bound together by a stronger link. We, of America, have the same origin with you, which binds us by a closer tie. We have the same climate, the same literature, for we draw all our knowledge, (our scientific knowledge I mean,) from almost the same sources; and therefore, how important it is that we should cultivate the spirit of brotherhood. (*Hear, hear.*) Standing here as the representative of the intelligence of America, in relation to this country, for I believe I may add, that in our land, among the well informed, there is a universal prevalence of this feeling towards the mother country, I say, sir, that we are extremely anxious to cultivate this reciprocal spirit from those in the highest ranks of knowledge to the lowest grades of society. (*Cheers.*) We have, gentlemen, the fairest race on earth. We have also the impulse of the Welsh or Celts, the steadiness of the Saxon or German character, and the energy of the Norman race; and we shall go on, unless interrupted by ambition, until all parts of the earth are impregnated with the Saxon religion, and to such an end I am bound to wish a speedy consummation. (*Cheers.*)—*New York Jour. of Med.*

EDITORIAL DEPARTMENT.

The Cholera.—The question, "will the Cholera revisit this continent?" so often, for several months past, in the mouths of physicians and others, is at last settled by the recent appearance of this dreaded Epidemic at New York. That it will appear at other places, and extend itself, to a greater or less extent, over the country, is to be expected from the history of its former visitation, and the course which it has pursued in other countries. The painful responsibility of treating the disease may at any moment fall to the lot of any one of our medical readers, wherever situated.

Are we prepared to meet the emergency by settled, rational views of its character and management? What is the actual state of our present knowledge of its causes, pathology and therapeutics? These questions must arise in the mind of every Medical Practitioner, and claim his earnest, candid consideration. We feel that we need offer no apology for submitting, at this juncture, a few reflections upon the subject, although well aware that many of our readers have greatly the advantage of us, both as regards practical acquaintance with the disease, and familiarity with its literature. While we would urge upon them the duty of communicating freely the conclusions at which they may have arrived by observation, reflection and study, tendering the pages of this Journal for that purpose, we will venture a few considerations, which we offer chiefly as suggestions, to call out better and more extended discussion by some of our correspondents, whose opinions are entitled to more weight than those which may be uttered by us.

Directing our attention, at once, to the subject in a practical point of view, we are led to consider whether at this moment our knowledge is farther advanced than at the previous prevalence of this epidemic, and if so, in what particulars our acquaintance with it may be regarded more complete and satisfactory? It must be obvious that, as a point of departure for a fair examination of the subject, it is important to survey the amount of real information which science may be considered to have acquired, defining, as clearly as practicable, the boundary lines separating the known from the unknown, and not failing to estimate correctly the latter, as well as the former. Of the assemblage of phenomena characteri-

sing the affection, and of its diagnosis, we need say nothing, for, under these aspects, the disease is sufficiently familiar. Without any enumeration of symptoms, then, we proceed to inquire concerning their relationships and dependencies.

The first prominent event in the clinical history is the evacuation of serous or sero-fibrinous fluid from the stomach and intestines. This is the first link in the chain of *appreciable* phenomena belonging to the disease proper. This, in the majority of cases, it is true, is preceded by more or less diarrhoea of a common character. The latter ushers in the disease, constituting the premonitory symptoms, but do not, strictly speaking, constitute a portion of the disease. That is to say, true Cholera, as a distinctive affection, does not commence until the serous discharges are apparent. Notwithstanding some reported analyses of the choleric evacuations which have lately been reported, it may probably be assumed as satisfactorily established, that these characteristic discharges consist of the serum of the blood, commingled, generally, with fibrin or lymph—in other words they consist of the *liquor sanguinis*. The blood thus loses more or less of its important constituents—constituents essential to its circulation, the changes it should undergo in the lungs and elsewhere, and to the several purposes which it is designed to fulfil in the economy. We suppose it to be pretty conclusively settled, that most of the phenomena which subsequently occur in the progress of the disease, are dependent upon this primary event. Certainly the series of distinctive symptoms which successively develop themselves, are capable of being rationally explained by reference to each other, and to the loss of the liquor sanguinis as the first appreciable proximate cause. The enfeebled circulation and pulselessness; the defective calorification and hæmotosia, giving rise to the extreme coldness of the surface and of the breath, the lividity amounting to cyanosis, and even asphyxia, and the unchanged atmosphere returned by expiration; the spasms; the cessation of transpiration and secreted fluids; the urgent thirst, &c., all which are the distinguishing external features of the disease, are clearly enough explicable by reference to the correlation of functions, and the impaired constitution of the blood. The latter is the first step in the series, and the former are sequences legitimately deducible from it. All these results may be intelligibly associated together, and collectively traced to the source just mentioned, but this the reader will readily do for himself.

What, then, the inquiry next arises, occasions the effusion of the serum of the blood into the intestinal tube? This question, if we could answer

it, would bring us to the essential morbid condition in which the affection consists, or, in other words, to the true proximate cause of the disease. The answer to this question involves full knowledge of the morbid state, or states, anterior to the serous evacuations, upon which the latter are dependent, and, also, full knowledge of the external or remote cause of the disease. Do we possess any information on these points? We must reply in the negative. Recollecting that we are always on safest ground, and nearer the truth, when we do not assume to have knowledge to which we have no valid claims, let us freely confess our utter ignorance of the essential nature and the ætiology of cholera. Investigation has shed no inconsiderable amount of light on the pathological history of the disease. But has not, as yet, carried us beyond sequences. This, alas! is by no means a single instance of like imperfection of our knowledge, and that we are peculiarly alive to the poverty of our science, in this instance, is owing to the enormous fatality of the disease, which leads us to experience more keenly the desire to bring it under the control of art.

Reflection upon the possible sources of that inappreciable and unknown morbid influence which produces the first appreciable and known clinical event in the history of the disease, will, as we think, lead to the conclusion that it is to be referred to the following, singly, or combined, to wit:

1. Perversion or poisoning of the blood.
2. A local morbid condition of the intestinal mucus surface.
3. Disorder of the nervous system.

To each of these, the proximate causation of the disease has been assigned by different writers. That the essential pathology lies within the compass of the three hypotheses is altogether probable, because we cannot conceive of the production of the morbid phenomena which characterize the disease except as emanating from one or more of these three departments of the organism. To discuss the respective merits of these hypotheses would require not a little time and space, and does not fall within our present purpose. Our own opinion (which we give for what it is worth) is in favor of the humoral doctrine. It seems to us most rational to suppose that the immediate action of the remote cause (whatever it be) is upon the blood: that a morbid principle pervades the atmosphere, which either vitiates the circulating fluid, or excites a fluxion to the gastro-intestinal mucous membrane, in order for its elimination, carrying with it the important elements of the blood itself, which appear in the discharges peculiar to the disease. We base this opinion, not upon positive facts, for the opinion is, in the present state of knowledge, purely hypothetical; it is not pretended that a

morbid change in the blood, or a morbid principle in it, have been ascertained. But the supposition comports best with the known circumstances involved in the production of the disease, and in its history, and also with its analogies to other general diseases, more especially the essential fevers, with which, by some writers, cholera has been classed. The opinion, moreover, is strengthened by the absence of positive evidences of constant, adequate lesions either of the intestinal mucous membrane, or nervous system, which we have more right to assume should be discoverable if the disease were due to one or both of these sources. With our present knowledge of the general pathology of the blood, it is not strange that its morbid condition in cholera should be of an occult nature, for this is the case in other instances in which the existence of unknown morbid conditions of the blood standing in a causative relation to diseases is abundantly established; but if the seat were in the nervous system, or intestinal membrane, (more especially in the latter,) we should much more expect that pathological appearances should have been discovered, and the fact that no uniform lesions have been ascertained, is much stronger evidence against the hypotheses which refer the disease to solid structures, than the same absence of positive knowledge is evidence against the existence of humoral changes which our means of analysis do not, as yet, enable us to discern.

Leaving theoretical reflections, and reverting to the question, has our actual knowledge of cholera advanced, and, if so, in what particulars, we are bound, as it seems to us, to acknowledge, that, as regards its pathology, all that may be considered to have been elucidated relates to the mutual relations of its secondary phenomena, the seat and nature of the prime, proximate cause being now, as heretofore, wholly undemonstrated, and a fair subject for differences of speculative opinion.

The aetiology almost necessarily occupies the same position with the pathology, both doubtless, being so closely connected that our knowledge of both must advance *pari passu*. The remote cause must be of a specific nature, for the disease not only possesses, in a striking degree, specific characters, but presents, in a remarkable manner, uniformity as respects these characters in all quarters of the globe. Of the diseases ordinarily attributed to specific agencies there are few which do not manifest greater variations in particular situations, and in individual cases. The cause is not only specific, but it is not easily affected by ordinary, modifying influences.

Equally certain is it, that the cause is epidemic. The supposition that an endemial specific cause is generated in each country, and portion of country in which the disease successively appears, is rendered absurd by

the law of probabilities. Such a series of coincidences as this supposition involves, is inconceivable. Our knowledge of the laws and conditions regulating the diffusion of the epidemic cause, is very meager. That it resides in the atmosphere is altogether probable, but in its transportation from one place to another, it does not appear to conform to atmospheric currents. The only positive evidence bearing upon the subject of its existence in the atmosphere that has been communicated, (so far as our knowledge extends) is that afforded by the observations of Dr. Prout, in the epidemic of 1832. Dr. P. observed a distinct barometrical change, denoting increased weight of the atmosphere, continuing steadily during the prevalence of the disease in London, which, as he thought, denoted the presence of a ponderous gas. But we are not aware that this has been confirmed by similar results in other places and periods; nor do we hear any confirmation, by the same observer, during the recent re-appearance of the epidemic in England. The progress of the disease shows a greater liability to be attacked by it among the inhabitants of towns, and unhealthy situations, than among those who reside in salubrious country regions. This, however, does not prove that the remote cause is more abundant in places where the disease most prevails, but that subsidiary morbid influences are more rife in those places, giving to the specific miasm greater efficiency, and rendering the system less able to resist its influences. That this is the true explanation, is shown by the fact that, of the population of a place where the disease prevails, the great proportion of its victims are among the classes who, on account of situation, habits of life, fear of the disease, occupation, state of health, &c., are more exposed to collateral morbid agencies, while they do not probably imbibe more of the poisoned atmosphere than those, in the same places, who are exempt from the disease. An atmospherical condition, capable, under favorable circumstances, of inducing cholera, it is most reasonable to think, must be widely diffused at periods when the disease prevails. This condition is indicated in places where cholera does not prevail, by an unusual proclivity to ordinary diarrhoea. This fact was noticed in this country during the previous visitation of this epidemic; and, in so far as we may judge from the limited sphere of our own observations, a state approaching to such a condition exists in this place at the time we are writing. We have certainly known and heard of an unusual number of cases of diarrhoea, of late, for the present season of the year, and we should not be surprised if this were the case generally throughout the country. If what we have noticed has any signifi-
cance as a forerunner of the epidemic, an increased

accumulation in the atmosphere of the specific cause, and the co-operation of other morbid causes, will be likely to determine, ere long, the occurrence of cases of cholera. The relative agency of subsidiary causes in the ætiology has an important practical bearing upon the prophylaxis which is too obvious to require comment. As regards the question of contagion, the preponderance of medical opinion is greatly for the negative, yet the affirmative has its adherents in the medical profession, and the doctrine of its *contingent contagiousness* is entertained by some writers of eminence. Some circumstances, upon superficial examination, appear to, sustain the popular tendency to view the disease as contagious—for example, its apparent transportation in vessels from Germany to Great Britain, in the epidemic now existing in the latter country; the first appearance of the disease at the Quarantine, near New York; its migration along thoroughfares, etc. These circumstances, are, however, it is believed, satisfactorily explained, irrespective of any admission of a contagious principle; and they are opposed by facts of a more weighty character which conflict with such an admission. We have accounts of the greatest possible degree of exposure to a contagious miasm, (if it exists) experiments of inoculation, &c., with negative results. Nor do we find, in places where the disease prevails, that of a given number of persons attending upon the sick, a larger ratio are attacked, than of the same number which may be selected in the same places who do not come into contact with the disease. The disease often appears in places and families completely isolated from any contagious influence, nor is it a general rule, that when cases occur, other cases follow in the same vicinity, in such a manner as to denote that the former occasioned a new focus for the extension of the disease. To these considerations, it may be added, that the character and progress of the disease are not favorable (judged by analogy) for the development of a poisonous emanation. Its rapid career, and the fact that its phenomena indicate diminution and abolition of functions, rather than vitiation, are opposed to the idea of contagion.

Candid examination of the merits of this important question, must, we think, satisfy every unbiassed mind, that the small evidence in the affirmative is overbalanced by an amount of evidence for the negative, which is nearly, if not altogether, adequate to establish the latter position.*

* The supposition that, in general, the diffusion of the disease does not involve a contagious principle, but that under certain circumstances, as yet not well understood, a contagious miasm may be generated, will perhaps best explain all the facts bearing on this point. This view is maintained by Prof. C. A. Lee, in his notes to the article on Choleric Pestilence, in Copland's Medical Dictionary, to which the reader is referred for a comprehensive and able discussion of the subject.

And of the causation of the disease in general, it may be remarked, that one of the best illustrations of our absolute poverty of knowledge on the subject, is afforded by the fact, that a hypothesis, as purely gratuitous as can well be imagined, after all, is adequate to explain the progress and diffusion of the disease, as well, if not better than others; we allude to the fanciful doctrine of the animalcular origin of cholera, maintained by Dr. Holland and others.

In the foregoing remarks, we have endeavored to sketch briefly the knowledge which medical science, in the present stage of its progress, possesses, of the pathology and causes of epidemic cholera. It is quite needless to disclaim any pretensions to elaborateness in what we have written. For this we have neither time nor space, saying nothing of resources and ability. This is not wanted. The literature of cholera is already sufficiently copious; in fact, so much so, as rather to repel, than invite investigation of the subject. But in the view of probability that we may soon be called upon to treat the disease, it behoves the medical practitioner to be prepared for this responsibility. And this preparation, as it appears to us, involves, first of all, a clear apprehension of what is known, and what is *not* known, respecting its character and origin. We may then proceed to arrive at some definite views, relating more immediately to its prevention and treatment. The latter topics we reserve for another number.

If the views which we have presented be correct, our knowledge of cholera certainly falls very far short of what could be desired; but the question which presses upon us, and which should regulate our practical conduct in this, as in all other points, is not, what could we wish to know, but what do we actually know. And it is a consideration which should never be lost sight of, that, in medicine, a just appreciation of the limits of our knowledge—of its poverty and imperfections—has practical relations of not less importance, than an equally just appreciation of all that science and art have discovered and rendered available. True philosophy and humanity dictate, not to estimate the value of what we have, by an imaginary sense of what is unattainable, or yet to be attained, but to make the best use of present resources, hoping and striving constantly for their continued accumulation.

BIBLIOGRAPHICAL NOTICES.

An Introductory Lecture on the Coinciding Tendencies of Medicines. By JARED P. KIRTLAND, M. D., Prof. of Theory and Practice of Medicine, and Physical Diagnosis, in the Medical Department of the Western Reserve College, at Cleveland, Ohio.

By the expression, "Coinciding Tendencies of Medicines," (which is taken from the Treatise of Miner and Tully, on Fever, published some twenty-five years ago,) the writer appears to mean, simply, that medicines, if injudiciously prescribed, may exert an unfavorable, instead of a favorable influence. The expression is not strictly correct, inasmuch as it is plain that remedies which are injudiciously prescribed, do not, in all instances, exert tendencies similar to the tendencies of the diseases for which they are prescribed; that is to say, they may not do injury by their coinciding tendencies, but often by modes of action quite different from the morbid actions to which they are added.

The principle which the subject of the discourse involves, is a truism certainly having no claims to originality or novelty. Yet the author seriously avers that it is passed over by medical writers, and mentions Miner and Tully's Treatise, as the only work in which it is duly considered.

It is with still greater surprise that we find it stated in the discourse, that the Cleveland Medical School is the only School in the country in which the subject receives attention even for a single hour.

If the Professor really intends to propound the theory that the hurtful results of medicines are, in their nature, *coinciding*, then we admit that the honor of the doctrine is to be divided between Miner and Tully, the Cleveland medical school, and himself. The idea, however, that he intends so to be understood, seems too absurd to be entertained. If he means only that the misnomer, "coinciding tendencies," is peculiar to the trio just mentioned, this would be readily enough conceded; but it would be too frivolous to claim any exclusive merit on that score. Either of these interpretations of the author's reasoning is probably incorrect; and, yet, it is hardly less inconceivable that he should suppose the injurious influences of medicines to be a subject overlooked by medical writers, and that it does not receive at other institutions than Cleveland more consideration than could conveniently be compressed into a single hour! We can see no alternative but to understand the language of the writer in this sense, strange as it may seem, coming, as it does, from one presumed to be conversant with the medical literature of the day. We do not deem it in the least necessary to argue against such an extraordinary position.

The following quotation will, we think, strike our readers with as much surprise as it did us:

"Acute disease always occurs as one of two qualities—either *sithenic* or *asthenic*. On employing these terms, permit me to say, that we use them only in their usual acceptation, and not with any reference to the Brunonian system. * * The *sithenic* is attended with a morbid accumulation of vitality, the principle of life, which imparts an increased power of acting. The *asthenic* is, on the other hand, attended with a diminished amount of vitality; consequently the power to act, in the system, is less than during health."

Prof. K. disclaims any reference to Brunonism in the use of the Brunonian terms contained in the above quotation; but how can the doctrine be considered other than the Brunonian doctrine? In his definition of the terms, they have precisely the signification which belonged to them as employed by Brown and his followers, to wit: denoting a *plus* and *minus* quantity of a supposititious principle called vitality. The terms are rarely used by late medical writers, and when used, they are generally understood to have a figurative sense. Their usual acceptation is certainly different from the sense which the writer of this discourse attaches to them. The expression *vital principle* is also employed in a metaphorical sense for the sake of convenience, but the idea of an entity, under this, or any other title, presiding with a sort of instinctive intelligence over the functions of the organism, we had thought was well nigh obsolete, having been laid on the shelf with other by-gone speculations. The existence of such an entity, in the foregoing quotations, is plainly assumed; imparting increased power in *sithenic*, and experiencing diminution of its natural power in *asthenic* diseases. We opine that our readers would not thank us for undertaking to disprove the correctness of the Brunonian theory.

The following concluding paragraphs contain assertions upon which we have already commented, together with some points to which we shall devote a remark or two:—

"To the young gentlemen, who are about to attend the course of instruction in these Halls, I would, in a particular manner, address the subject of the coinciding tendencies of medicine.

Important as it is, this Institution, I believe, is the only one in our country, in which an hour is devoted, during each term, to its consideration. It is slightly alluded to in a few authors. In Miner and Tully's work on Fevers, it occupies an interesting chapter.

With those gentlemen I was intimately associated in early life, and to them was originally indebted for many of the views I have laid before you on this occasion. An extensive experience has subsequently confirmed their correctness.

It is my ardent wish that they may prove to you, in your future practice, as valuable guides as they have to me in days that are past.

From the moment the student of medicine first opens a treatise on Theory and Practice, till he receives the honors of the Institution, he is taught, in most schools, to consider medicines as simply the antagonists of disease; and is not initiated into the important secret, that medicines, under certain circumstances, may themselves become the source of disease. He enters upon the stage of action with the firm persuasion, that he has only to administer medicine with a bold and liberal hand, and he will at once convert disease into health; that, like Alladin in oriental fable, he has only to rub the lamp, command, and it will be executed. Experience soon convinces him that his views are incorrect. On treating disease, he finds himself surrounded with new and anomalous symptoms, of which he had no previous conception, and which increase by every effort at extirpating them—ignorant of the source of the perplexities—he becomes distrustful of the certainties of medical science.

If he be a man of principle, he will most likely retire in disgust from the profession, and ever after remain the most confirmed of medical skeptics. If, by chance, he is destitute of principle, he will probably continue to practice it, as a mere trade or art, for the purpose of obtaining his daily bread, but will dwindle into insignificance as he advances in age.

You have been furnished with a key to such perplexities.

These doctrines, I am aware, are not palatable to young and ardent students. They dislike to be told that prudence, and not boldness, should be exercised in treating the sick.

These principles I have taught many years. They have been received with coldness by a majority of my classes. That matters not; it is not my duty to pamper students' tastes in my teachings; but it is both my duty and pleasure to fit them to be skillful and judicious practitioners.

I know that in a few years you will recall to mind these sober truths, and put upon them a just estimate. Receive them, then, young gentlemen! store them away in your memories; and when you have matured in experience and professional knowledge, recall them to mind, and test them in the strictest manner."

An analysis of the above, develops the following declarations viz: (a) The principles set forth in this discourse are not taught at most institutions; but at Cleveland an hour's attention is devoted to them, although received with coldness by the majority of the classes. (b) Students educated at other institutions where these principles are not inculcated, after entering upon practice, become distrustful of the certainties of medical science; and, if they are men of principle, they retire from the profession in disgust, remaining the most confirmed of medical skeptics; but if, by chance, they are destitute of principle, they will probably continue to practice the profession as a mere trade.

The logical deduction from the two postulates just given, is, that all practitioners of medicine who have not enjoyed the advantages of the information communicated in the aforesaid hour at the Cleveland Medical

College, are devoid of principle, and practice their profession as a mere trade!

With such views, the publication of this address is certainly evidence of the disinterestedness and philanthropy of the author; for, by its perusal, possibly some of the few men of principle who enter the profession unacquainted with that necessity of going to Cleveland which has heretofore existed, may be prevented from leaving in disgust. At the same time, the classes annually assembling at Cleveland will be better satisfied, inasmuch as the author intimates that the hour devoted to this discourse has been by no means acceptable to them.

A Treatise on Etherization in Child-birth. Illustrated by five hundred and eighty-one cases. By WALTER CHANNING, M. D., Professor of Midwifery and Medical Jurisprudence in the University at Cambridge. Boston: William D. Ticknor & Company, 1848. 8 vo. pp. 400.

This volume will commend itself to the admirers of elegance in typography. It is beautifully printed with large clear type, on fine paper, and, indeed, is creditable even to Boston publishers. We speak of its external recommendations first, simply because, with the book before us, they first suggest themselves. Its attractiveness, by no means, chiefly lies in externala. If we are not mistaken, it will prove as acceptable, as it is opportune. The importance of the subject is obvious. It is a subject with regard to which a large proportion of the profession are waiting for facts sufficiently numerous and authenticated, to determine their opinions and practice. Such a collection of cases, emanating from a quarter which secures confidence in their validity, cannot but command attention and interest. Prof. Channing remarks upon the appropriateness of a work upon that subject being issued at the place where he resides. Without concurring fully in the unqualified attribution of the honor of the discovery of anæsthetic inhalations to Boston, it will not be denied that the importance of the discovery here first became appreciated sufficiently for its practical availability to be fully tested, and, by the experiments repeated and extended at the Massachusetts General Hospital, subsequent observations in all countries may be said to have been originated. We would respectfully remind our Boston brethren not to overlook the fact that successful experiments for the same end were made prior to those of Jackson and Morton, by a resident of Hartford, Connecticut. We would say, in the words of Commodore Perry after the battle of Lake Erie, "there is glory enough for all." Boston has acquired honor enough in this matter, to be able to afford all

that in justice, or generosity, is demanded on behalf of the memory of Dr. Wells. We agree, then, with our distinguished friend, that such a work comes with singular propriety from the Boston press; and we would add, what the author would be the last to intimate, that such a work could not, with so much propriety, come from any other pen. Professor Channing was the first in this country to enter upon a series of experimental observations of the applicability of anæsthetic agents to midwifery. He is thus identified with the early history of the subject, and it is fitting that he should take the lead in its bibliography. In addition to this, we know of no one whose position as teacher of obstetrical medicine, and whose character as a medical philosopher and writer, should better entitle him to such precedence.

We have said that, as regards the application of anæsthetic agents to midwifery, a great portion of the profession are, as yet, undecided. There exists a suspension of judgment, not only from that cautiousness which is reasonable and proper, but because eminent teachers of midwifery differ on the question. With regard to this difference, however, it is worthy of note, that the advocates of the practice base their opinion on the facts disclosed by their experience, while the opponents (so far as we know) have come to a decision from speculative reasoning, mainly, of the merits of the subject. Our own opinion would possess very little importance, nor do we feel called upon to express an opinion. In fact we have none. We have not yet made trial of etherization in obstetrical practice. We shall peruse Prof. Channing's treatise with care and interest, so soon as our engagements will permit. In the meantime, we would urge our readers, most of whom have the advantage of us in leisure, to make the same resolve, and act upon it. In examining the work, we find it is chiefly made up facts, in other words, cases occurring in the practice of the author, and of his numerous friends. This is the kind of book which is wanted. And having stated this, we have not the vanity to suppose that it would add to our recommendation of the work, if we were prepared to express opinions formed after the careful perusal which we are impatient to bestow upon it. Let the reader obtain the book, study the facts, and draw his own conclusions.

Analytical Compendium of the various branches of Medical Science, for the use and examination of Students. By JOHN NEILL, M. D., etc. and Francis Gurney Smith, M. D., etc. Philadelphia: Lea & Blanchard, 1848. 12 mo.

The usefulness of works of this description has been called in question. We conceive that they may be useful to the student, if properly used;

that is, their objects are legitimate, but they are capable of being applied to wrong purposes. If they were to be made subservient to what has been significantly called a *cramming* process, by which a superficial, smattering knowledge of the several branches of medical science, only, is obtained, they would be, beyond a doubt, not merely among the *excrescences*, but among the *nuisances* of medical literature. But when, on the other hand, they are made subsidiary to other works, and to oral teaching, assisting to review the knowledge acquired through the latter channels, they are both convenient, and useful. They may also be of assistance to the practitioner by affording an easy method of reviewing his knowledge, and refreshing his recollection of the more important facts of medical science. As we do not deem the liability to abuse, a valid objection to the proper use of any good thing, we are not opposed to the publication of such works, and the above seems to be prepared with care and judgment. It is divided into seven parts, to wit, Anatomy, Physiology, Surgery, Obstetrics, Materia Medica, and Therapeutics, Chemistry, and the Practice of Medicine.

The Principles and Practice of Modern Surgery. By ROBERT DRUITT, Fellow of the Royal College of Surgeons. A new American, from the last and improved London edition. Edited by F. W. SARGENT, M. D., author of *Minor Surgery*, etc. Illustrated with one hundred and ninety-three engravings. Philadelphia: Lea & Blanchard. 1848. 8 vo. pp. 576.

As this work has been heretofore ably reviewed in this journal by a correspondent and colleague, it is only necessary to chronicle the fact of a new edition, which the author informs us, in the preface, has been considerably enlarged by the addition of new practical matter, furnished by surgical improvements that have been made since the first edition was published. The previous American editions were edited by Dr. Joshua B. Flint, of Louisville, Ky. Owing to the distance of Dr. Flint from Philadelphia, and the difficulty of superintending its progress through the press, he declined further editorial connection with the work, and his place has been filled by Dr. Sargent, favorably known by his recent *Treatise on Minor Surgery*. Dr. Sargent has retained the notes to former editions by Dr. Flint, excepting those incorporated by the author in the text, and has added such "results of the skill and industry of American Surgeons as appeared most worthy of mention."

Harrison's Anatomy; a Text Book of Practical Anatomy. By Robert Harrison, M. D., M. R. I. A.; Professor of Anatomy and Surgery in the University of Dublin, with Additions by an American Physician. New York. S. S. & W. Wood; No. 261 Pearl St. 1848.

The well merited reputation of the Dublin Dissector by the same author, led us to anticipate a valuable addition to this department of science. Examination fully confirms our expectations.

The work before us is a new edition of the Dublin Dissector, much improved. Enlarged to the extent of 720 octavo pages, it appears to contain all that is necessary for the objects set forth in the preface, viz., to direct the student in the manner best adapted to facilitate his enquiries, and to perfect his knowledge of anatomy.

The arrangement of the work is such as to be readily consulted in the Dissecting Room, for which it is especially designed.

The additions by the American Editor, though not numerous, will be gladly received. Sufficiently minute, without tedious prolixity, and abounding in suggestions of practical value, it cannot fail to be a favorite work with the student of anatomy. Its utility is very much increased by the introduction of numerous plates, and the addition of a copious index.

It is a valuable work, and we cheerfully recommend it. C. L. F.

Meachem on Dysentery.—A practical paper in your last number was this,—replete with good sense when its author reflects, and utters himself. The Ontario Medical Society did well in advising its publication;—would it not have been better to have noted and given heed to this statement of other's treatment, p. 409;—an inadvertence so frequently met with, we are now induced to speak to it:—"Some *relied* mainly on astringents, such as acetate of lead combined with Dover's powder." A *reliance* probably suggested by first thought facility of Opium and Ipecac mixed, and at hand, in Dover's powder. We opine an insoluble sulphate of lead, a product of this combination, would not contribute materially as a curative in any disease, and, as a *reliable* astringent base, would be decidedly "expectant" for a result, in an epidemic dysentery, which, under the best treatment, in numbers attacked, severity, and fatality, is believed the past season, to have out-Heroded itself.

W. T.

Gardner's Medical Chemistry for the Use of Students and the Profession. Philadelphia: Lea & Blanchard. 1848. 12mo. pp. 396.

A treatise of chemistry adapted specially to the wants of medical students, is certainly one of the desideratas, or, to speak technically, one of the

"indications" of the times; and as the first effort to "fulfil" this, we hail the appearance of the present volume. We have not yet been able to give it more than a hasty glance; but its style appears to be clear and lucid, and the arrangement of its subjects judicious and well proportioned. In one respect it commends itself to our eyes before opening its leaves, and that is in the moderate distance between its covers. If the book, whatever its subject, is to be a text book, give us a thin one. And this is a duodecimo of less than 400 pages.

G. H.

Medical Lexicon. A Dictionary of Medical Science; containing a concise explanation of the various subjects and terms; with the French and other synonymes; notices of climate, and of celebrated mineral waters; formulæ for various officinal and empirical preparations, etc. By Robley Dunglison, M. D., Prof. of the Institutes of Medicine, etc., in Jefferson Medical College, Philadelphia. Seventh edition. Carefully revised and greatly enlarged. Philadelphia. Lea & Blanchard. 1848. 8vo.

This work has passed through six previous editions, each of which has embraced copious additions, and other improvements. The author states that in the present edition he has added between *six and seven thousand terms*. The size of the page has been increased, and the work enlarged by more than one hundred pages. It is doubtless now the most comprehensive and best English dictionary of medical terms extant.

Essays on Infant Therapeutics; to which are added Observations on Ergot, and an Account of the Origin of the Use of Mercury in Inflammatory Complaints. By John B. Beck, M. D., Prof. of Materia Medica in the College of Physicians and Surgeons of the Univ. of the State of New York, etc., etc., etc. New York. W. E. Dean, Printer and Publisher, No. 2 Ann Street, 1849.

The essays upon infant therapeutics, are the communications on the effects of opium, emetics, blisters and mercurials, on the young subject, which have appeared in different medical journals within the last two years, and have been presented in the eclectic department of previous numbers of this Journal. Collected together, with articles on ergot, and the use of mercury, which had previously been communicated, they make a thin duodecimo of a little over one hundred pages, and will doubtless be acceptable, in this form, to the profession.

An Introductory Lecture to the Medical Class of the University of Louisville. By LUNSFORD P. YANDELL, M. D., Professor of Chemistry and Pharmacy.

This is a sensible discourse, written in a chaste dignified style. The reader rises from its perusal with a high regard for the author's spirit and ability.

The Universal Guide to Health, by a rational Course of Food and Diet.
By ANDREW COMBE, M. D. Seventh Edition. Buffalo. G. H. Derby &
Co. 1849. 12mo. pp. 310.

This well known and most admirable work of Dr. Combe, is now very justly regarded as standing at the head of all publications relating to the subject of which it treats. The author was one of the first to perceive the real importance of physiological knowledge to the general public, as he has been altogether the most successful in his mode of conveying it. The amount of good which his works have been instrumental in doing, both in Europe and this country, is incalculable; and they are destined to exert a still wider influence than they yet have done. The present Essay relates chiefly to the function of digestion and the principles of dietetics, and to say that it is the best work on the subject, both for the professional reader and the public, is but saying what is universally known and acknowledged.
—For sale at Derby's. C. A. L.

Transactions of the American Medical Association.—Inquiries are frequently made respecting the mode of procuring copies of the above. The following information on the subject is copied from the Medical News:—

"Medical Societies which have been represented in the Association will be furnished copies on the same terms as members, (viz: three copies for five dollars,) on remitting the amount to the Treasurer.

To other persons the Transactions will be furnished at the rate of two dollars per copy in paper covers, done up for mail, or two dollars and fifty cents in embossed cloth, on remitting the amount direct to Messrs. Lea & Blanchard, Philadelphia. Or orders left with booksellers will be executed by Messrs. Lea & Blanchard.

Valedictory Address to the Students of the Medical College at La Porte, Indiana. By A. B. SHIPMAN, M. D.

We should have acknowledged the receipt of a copy of this discourse long ago. It was delivered to the graduates at the close of the last session, and contains judicious counsel with reference to professional conduct and success.

Statistics of Cholera.—For the following statistics of cholera, in other countries, quoted from various periodicals, we are chiefly indebted to the *Medical News and Library*. It will be perceived that the ratio of mortality, in different countries, is remarkably uniform, being a little over one half the number of cases. The bearing of this fact upon the subject of treatment is deserving of notice.

"In *Russia*, between the 28th of October, 1846, the period of the

commencement of the epidemic, and the 5th of July, 1848, 290,318 persons were attacked, of whom 118,668 died."

Berlin.—"From the 27th of July, to the 11th of October, 1848, the numbers have been as follows:—Numbers of cases, 2009 Deaths, 1262. Recoveries, 472. Under treatment, 275."

Hamburg.—"The official report states that up to the 9th inst., the total number of persons attacked, was 2,229, of whom 1,043 had, up to that day, fallen victims; that 411 remained under treatment, and 775 had been cured."

Turkey.—"The accounts received from *Constantinople* by the last mail, announced that the cholera is gaining ground, the daily mortality averaging nearly 200."

At Smyrna, total attacked, 3,212. Total of deaths, 2,494.

Syria and Palestine.—"At *Damascus*, the deaths are reported as varying from 500 to 600 daily. *Aleppo* averages 150. *Antioch* about 50 daily."

The Hague.—"In the cholera hospital 44 patients have been received; of these, 18 have died, 3 have recovered, and the remainder are under treatment."

Scotland.—"Up to Nov. 7, 468 cases had been reported; deaths, 243; recoveries, 54."

Cholera at New York.—The disease made its appearance early in December, at the Quarantine ground, Staten Island, among the passengers by the ship *New York*, which had just arrived from Havre. It broke out among, and has been for the most part restricted, to the German passengers by the *New York*. A considerable proportion of the cases that have occurred at Staten Island, have occurred among patients in the marine hospital, who were inmates of the hospital before the arrival of the ship *New York*, and who had no intercourse with the cholera patients from that vessel. One case only, has, as yet, occurred in the city, the patient having had no intercourse with the Quarantine. We hope full and accurate statistics will be preserved and reported, not only of the number of cases and deaths, but of those who were in intercourse, direct or indirect, with patients laboring under the disease, both before going on board the vessel *New York*, and at the Quarantine. Statistics on the latter point are highly important as regards the question of contagion. We have not taken pains to collect all the daily reports of the Quarantine Physician, Dr. Whiting, to the Mayor of New York; but we have before us these reports from December 7th to 20th, inclusive. During that period 44 cases occurred, and 20 deaths. Of these cases, it is stated, that 24 were passengers by the vessel *New York*, and 7 had no connexion with the passengers by that vessel. As regards the remaining 13, the reports are not explicit. The disease is still progressive.

The necessity of Quarantine regulations, in order to prevent the diffusion of the disease, is an important question. Its importance to those in Quarantine, as well as to those who are apprehensive of infection, should not be overlooked. It seems really a needless hardship, to detain all the passengers of the ill-fated New York, until the major part die with the disease. Are not the circumstances connected with their detention in Quarantine, calculated to predispose to the disease? Since probably not one in ten of Physicians, and the public, regard the disease as contagious, it strikes us as more than an absurdity to act in direct opposition to this opinion, when the inhumanity of such a course is but too obvious.

Cholera at New Orleans.—It seems now (28th Dec.) pretty certain that the disease has made its appearance at New Orleans. On the 23d, seventy-nine had been reported since the 20th, at the Charity Hospital, and new cases were hourly occurring. Several merchants of the city had died with the disease. The citizens, with the selfishness so apt to be developed by the apprehensions of a pestilential disease, are clamorous for Quarantine restrictions, and endeavoring to flee from the disease. There is no evidence, in the reports thus far received, that the disease was imported from abroad.

Convention of Delegates from Western Schools.—The Editor of the Ohio Med. and Surg. Jour., in a late number, suggested a convention of delegates from Western schools, to meet at Cincinnati, Ohio, in order to consult upon matters relating to medical education, with a view of uniformity in fees, duration of lecture terms, and other matters. The object appears to us highly important, and the proposition is advocated by the Western Lancet, and the Western Med. and Surg. Jour. Although not authorized to speak on behalf of the Buffalo Medical School, we presume the proposition would be acceptable to the Faculty of that Institution, should all the other schools unite upon it. It strikes us that, to save the trouble of a convention at Cincinnati, delegates from all of the schools attending the meeting of the American Medical Association in May next, might hold their convention at the same time and place. An additional reason for this is, that the action of the convention might be influenced by the action of Eastern schools, and the proceedings of the Association. The Buffalo College has already gone as far as any other medical institution of the Union, in adopting the recommendations of the American Association, which is a pretty good guaranty that she will not be backward in her concurrence with other

Western schools, in any action which promises to forward the objects of medical education, or the best interests of the Profession.

Delegates to the American Medical Association.—The committee of arrangements request that societies, and other institutions authorized to appoint delegates, send correct lists of those chosen to attend the next annual meeting, to *Dr. Henry J. Bowditch*, Boston, on or before April 1, 1848.

New Year—Eheu! fugaces, Postume, Postume, Labuntur Anni.—Another annual stadium of the journey of life is completed! Another new-year's day, like the mile stone, reminds us that we are hastening onward, with rail road speed, to that goal—the common destiny of man—when years will cease to be numbered. It is a season signalized by joyous hilarity, but, to the reflecting mind, it is also a time for sober meditations. Our readers may, perhaps, congratulate themselves, that we have no space for editorial moralizing. The compositor limits us to a few lines—just to express to our patrons our cordial greetings, and fervent wishes that the commencement of a new year may prove to each and all, an occasion for happy retrospections, and bright anticipations.

To Correspondents.—We occasionally receive for insertion, in this Journal, reports in which reflections upon treatment pursued by other physicians in the case, are implied. To obviate the necessity, in future, of rejecting such communications, we would state, that this will always be with us a sufficient ground for declining their publication. Whenever we receive such an article, we suspect that improper motives have actuated the writer; and, apart from our indisposition to lend our pages for any sinister objects, the facts purported to be set forth, are, as we think, invalidated by the occasion for such a suspicion.

Dr. Hard's communication has been received, and will appear in our next number.

We would acknowledge the receipt of Dr. D's letter, to which we will respond.

Books received, and not yet noticed, will receive attention as early as convenience will permit.

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ORIGINAL COMMUNICATIONS.

ART. I.—*Ship Fever.* An Inaugural Thesis, submitted for the degree of M. D., at Geneva Medical College, Jan. 1849. By ELIZABETH BLACKWELL, M. D.

The summer of 1847 was distinguished by the epidemic brought to our seaport towns by means of, the crowded emigrant ships, which arrived in great numbers from Europe. Our hospitals were filled to overflowing with patients in every stage of the disease,—many died in the receiving wards, many more only entered the hospital wards to prove the inefficiency of the resources of medical art. An examination of the nature of this disease, showed it to be a species of Typhus.

Much discussion has arisen in the Profession, in relation to the distinction between typhus and typhoid fever. The majority of French writers, and high authorities in our own country, recognizing a distinct disease, under the latter title, or enteric fever, possessing most of the symptoms which mark typhus, but distinguished chiefly by a violent affection of the intestinal canal, producing diarrhoea during life, and revealing to anatomical investigation, a remarkable lesion of the mesenteric glands, and the glands of Peyer—while the English writers generally consider enteric fever as only a form of typhus, and not possessing those peculiar characteristics, that would entitle it to rank as a distinct disease. This latter opinion has been well stated by Cruveilhier, who in this respect differs from the majority of French physicians,—he says:—

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"The miasma (from which he supposes the disease to originate) is carried by the air into the lungs, whose mucous membrane, so eminently absorbent, serves the purpose much oftener of absorbing, than of eliminating miasma, and other morbid causes, being, in this respect, in opposition to the skin and the intestinal mucous membrane. When the miasma is absorbed, it is carried into the current of the circulation, and infects the blood. Sometimes it acts immediately, at other times it needs, like a germ, a certain period of incubation. At the moment of explosion, a chill, more or less violent, takes place—a sort of centripetal movement, which announces that the economy is under the dominion of a cause which oppresses it, and that the digestive system is violently affected. Individuals have been known to die during the chill. The centrifugal movement, the reaction, heat, the development of the pulse, follow. It is then that the miasmatic cause is carried to this or that organ—sometimes to the isolated or aggregated mucous follicles, when follicular enteritis follows; sometimes to the mucous membrane of the large intestine, when diarrhoea or dysentery supervenes. In other instances the miasmatic cause is directed to the lungs, or the brain—sometimes it is exhausted on a single organ, and again it is carried simultaneously, or successively, to several organs—in other words, in certain constitutions, the miasmatic cause reaches the large intestines, in others, the aggregated or isolated glands of the small intestine, in others the lungs, in others again the brain, &c., and these individual peculiarities, the various influences of all sorts, in the midst of which typhus is developed, explain the innumerable differences, which successive epidemics present." This description, as will be presently seen, applies accurately to the epidemic of 1847, where the same morbid causes produced, in different individuals, the diverse phenomena described. It may also be stated, in general terms, before proceeding to a more detailed description, that this disease was subject to the general laws of fever, viz, muscular debility, action and reaction, and the daily exacerbation impressed on all febrile action by the rhythmical movements of life; and exhibited the characteristic marks of typhus-stupor, dark color of the face, the eruption, peculiar odor, darkordes, &c.

In seeking the causes of this epidemic, we are unable to find any which would indicate an essential difference between it and many preceding ones. Ireland, from which the immigrants chiefly came, has often suffered from sickness produced by general destitution. In 1847 an epidemic prevailed, caused by the wet changeable weather, which ruined the harvests, and reduced the people to a scanty supply of unwholesome food. Many a "Fam-

ine Fever," has stamped its dismal image on the minds of the older inhabitants. But so fearful a state of universal destitution and sickness, as prevailed in 1847, has not been recorded in the annals of that unhappy country. It seemed to be a summing up of the horrors of all former suffering.

To escape the terrible evils of famine and pestilence, which threatened them at home, the lower classes of the inhabitants hastened in crowds to take refuge in America. The ill ventilated steerages of the emigrant ships were filled to overflowing, the air becoming constantly more impure from the bad habits of the passengers; their stores of poor provisions were frequently insufficient to sustain them, the water was often bad, and limited in quantity—here, deprived of all excitement, without employment or exercise, their minds had time to brood over the fearful scenes they had left—fear, sorrow, anxiety, joined with the physical evils of their condition, tended to depress the vital energy, and the seeds of disease sown in their constitutions were thus nourished into life; the disease broke out with great violence, and many died before reaching land.

The following account of the phenomena of the fever, is derived from personal observations, made during my residence in the Blockley Hospital, Philadelphia, and the method of treatment discussed, is that pursued in that institution:—

As the patients arrived in every stage of the disorder, and were not able to give an intelligent account of their previous sufferings, and as few of the inmates of the hospital contracted the disease, sufficient data was not collected to determine the period of incubation. The cases of acute disease, ordinarily, do not produce action immediately upon application, but so many circumstances may affect individual instances, that a wide experience, only, will determine the general law. In ordinary typhus, from one to two weeks are supposed to elapse, before the effects of exposure appear.

The method of attack varied greatly. In some it commenced suddenly with a violent chill and headache, prostrating the patient instantaneously; but more frequently there were premonitory symptoms for several days,—such as more or less headache, accompanied by pain in the back, and general uneasiness in the whole system, an indisposition to all mental and bodily effort, alternate chilliness and flushes of heat, a shrinking tenderness of the whole body, loss of appetite—these, and corresponding symptoms, after lasting for two or three days, entirely prostrated the energy of the patient. Nausea or vomiting commonly attended the commencement of the disease. A chill of varying intensity marked the first stage, accompanied by a feeble pulse, and other signs of depressed vital action; febrile reaction, usually

followed in a few hours, marked by a frequent pulse, often full and somewhat resisting in subjects who possessed much constitutional vigor; the skin was hot and dry, and the tongue furred; the symptoms of excitement continued to increase for several days, the pulse became more frequent and less forcible, mounting to 120, and sometimes 140 beats in a minute, the respiration was quick, the skin hot, dry and harsh, the tongue covered with a thick brownish yellow fur, the eyes heavy and bloodshot, the eyes of a dusky red color, the head aching, the brain oppressed, with stupor or slight delirium; an eruption appeared all over the body, particularly on the chest and abdomen, which lasted four or five days; these spots were small and close, resembling somewhat the eruption of measles in size and color,—occasionally in cases which terminated fatally, they lasted throughout the disease, changing to a purple hue as the fever assumed a more malignant character.

The following sketch which I made by the bedside of the patient, will serve as an illustration of the general termination of the fever when it proved fatal. The symptoms of nervous derangement which had existed ever since her entrance, increased; the skin still continued hot, but flabby, and covered with sweat; the eyes were bloodshot and nearly closed; the mouth half open, drawn on one side, the saliva trickling down; the teeth and gums were covered with hard sordes; the tongue dry, with black crusts, and incapable of protrusion; the breath of a peculiar and offensive smell; respiration labored, the chest heaving violently; the movement of the heart extremely feeble, the pulse almost extinct; the patient lay in a comatose state, with entire loss of voluntary power; medicine could no longer be swallowed, the head slipped down on the chest; there were now involuntary passages of a dark green color; the neck and other parts of the body were swollen and of a livid hue. Sometimes a furious delirium occurred in the last stage; and occasionally the vomiting of black sooty fluid, preceded death.

There were great differences in the state of the alimentary canal. It was always affected in the commencement of the disease; sometimes a diarrhoea continued throughout, with nausea or vomiting; again costiveness would alternate with looseness of the bowels, or would resist the operation of purgatives, throughout the disease. The cases exhibited every variety of condition in this respect. After death, the body frequently swelled, and became of a dark purplish hue, which appearances subsided after the lapse of a few hours.

The facts in relation to the post mortem appearances presented in Ship

Fever, were kindly furnished me by Dr. Knight, one of the physicians of the institution.

Blood drawn during the different stages of the fever, rarely presented an inflammatory appearance; towards the fatal termination of the disease, it was dark, almost black, the coagulability of the fibrine being, in many cases, entirely lost.

Anatomical investigation proved the congestive nature of the disease. The brain and its membranes frequently showed marks of congestion, with occasional effusion of serum. Sometimes the signs of stagnation in the lungs explained the distressing dyspnoea that had existed during life. The liver, and particularly the spleen, were found to be softened and enlarged; this latter organ was invariably affected, its enormous distension giving it many times its natural weight, amounting in one instance, to over seven pounds; the softening of its substance gave no indication of inflammatory action, no coagulated fibrine was found in its cells, and few traces of inflammation appeared in the other viscera. Occasionally extensive lesions of the alimentary canal were observed. Sometimes the glands of Brunner were affected, and the isolated and aggregated glands of the ileum were found in a state of enlargement and ulceration.

Various plans of treatment have been adopted in typhus, according to the different theories which have prevailed in relation to the nature of the disease; thus, the stimulant, the antiphlogistic, the emetic plans have been each exclusively and eagerly advocated.

It is important to remember that successive epidemics of the same disease differ so greatly in their essential types, that a method of treatment generally successful in one, may be as fatal in another; this modification of disease proceeds from causes of which we are ignorant, and exerts a wide-spread influence, affecting not only the prevailing epidemic, but all other diseases existing at the same time; thus, when an epidemic has been marked by high, inflammatory symptoms, it has been found that other diseases not usually inflammatory, have for a time, assumed that type, and required an entire change of the ordinary treatment. An old writer, expressing this fact, says quaintly, "there are various constitutions of years, that owe their origins neither to heat, cold, dryness, nor moisture, but rather depend upon a certain inexplicable alteration in the bowels of the earth, whence the air becomes impregnated with such kinds of effluvia, as subject the human body to particular distempers, so long as that kind of constitution prevails." As no two epidemics of the same disease, present exactly the same form, so no two individual cases of the same epidemic, are exactly

alike. Variety in unity, is a universal law, and no more in diseased than in healthy action, does Nature ever repeat herself. Each case, therefore, must be studied separately, and the medicines adapted to individual peculiarities. The general laws for treatment can be laid down, but the combinations required by the infinite variety of life, must be left to medical skill, exercised by the bedside of the patient.

It is evident, by the description already given, that the epidemic we are considering, did not present an inflammatory type—the symptoms presented during life—autopsical revelations—and a few experimental cases—all proved that venesection was not required, and could not be borne. The stage of high excitement which marked every case, contra-indicated the exclusive employment of stimulants. The most successful treatment, was one that adapted itself to the different stages of the fever, being sometimes a modified antiphlogistic plan, sometimes stimulating, and frequently simply expectant. Dr. Rush remarks, that “however excessive or deficient Nature may be in her attempts to throw off febrile disease, she rarely errs in pointing out the manner or emunctory, in, or through which, it ought to be discharged.” The symptoms of a disease, therefore, furnish valuable indications of the method which Nature is taking to remedy the injury received, and her plan is frequently the best; but Nature is blind; her efforts must be watched, and sometimes guided; sometimes restrained; an effort salutary at the commencement, may be carried beyond the necessary point, by the habit or inertia of vital movement, which is as dangerous in disease, as it is essential to health; or a local disease, a symptom, which would constitute an important crisis of the general disease, if carried to the skin, becomes injurious, when directed to an organ essential to life; this not unfrequently happens. The skill of the physician is therefore indispensable to judge and direct the efforts of Nature; thus in the early stage of the fever, when nausea or vomiting, or a tendency to diarrhœa existed, an emetic, followed by some mild purgatives, sulphate of magnesia or castor oil, produced the happiest effects, frequently cutting the disease short at its commencement.

The majority of patients, however, arrived after the febrile movement was fully established; if the pulse was tolerably firm, and no signs of exhaustion present, the refrigerant diaphoretics answered the chief indications—the neutral mixture, combined with small doses of tartar emetic, the acetate of ammonia, or sweet spirits of nitre. To quiet nervous symptoms and wakefulness at night, Hoffman’s anodyne, and a Dover’s powder in the evening, were useful; the heat and dryness of the skin were relieved by frequent sponging with cold water. If headache existed, cold water or

ice was applied to the head. The state of the bowels was of great importance; when costiveness existed, frequent purgatives were necessary, adapted to the condition of the system—in the early stages, when the pulse had considerable strength, the saline purgatives were most suitable; at a later period, rhubarb, alone or combined with calomel, or enemata of castor oil, or oil of turpentine, were preferred. When, on the contrary, there were distressing nausea or vomiting, or exhausting diarrhæa, other remedies were called for—an effervescing draught, a mustard plaster, or cups to the pit of the stomach, small pieces of ice continually swallowed, relieved the gastric symptoms; the chalk mixture, with kino or catechu, small doses of opium and ipecacuanha, with the addition of acetate of lead, rhatany, or some other suitable astringent, checked the excessive action of the bowels. Ipecacuanha alone or in combination with opium, proved a valuable remedy in checked and vitiated secretion.

When the disease held its course unchecked by medicine, stimulants became essential to the successful treatment, and patients arriving at the hospital in the last stages of collapse, were restored to life by their energetic exhibition. The skill of the practitioner was nowhere more strikingly displayed, than in the anticipation of this period of collapse; by seizing the first moment when the vital energy began to abate, although, to the inexperienced observer, the symptoms of excitement still existed in full force. The carbonate of ammonia, wine whey, and brandy punch, were the stimulants most commonly used; the former was given in emulsion, to the amount frequently of 3i a day. The latter, one part of wine or brandy to two of milk, were taken, a table spoonful every hour or half hour.

Where the symptoms were in the last degree urgent, more powerful stimulation was necessary; pure brandy was frequently administered; mustard or cayenne pepper was applied to the extremities and the inside of the thighs; hot fomentations, blisters applied for their rubefacient effect only; the temperature of the skin being maintained by hot water, bricks or sand. These powerful applications were of course only called for in cases of extreme danger. Very frequently a state of great debility existed, when the excitement of fever had in a great measure passed away, the pulse being extremely feeble, though sometimes frequent, and the skin partially hot, and it was then essential that tonics, nutritive, and even stimulating food should be employed; but their effects were carefully watched, and their use discontinued when they tended to reproduce the febrile symptoms. The preparations of bark were often highly useful; opium in small quantities, repeated so as to produce a steady excitement; porter also was

serviceable; nutritive food was often required at this time, the essence of beef or mutton, a table spoonful every hour, egg-nogg, and similar articles.

Great attention was paid to the thorough ventilation of the wards; perfect cleanliness enforced in the person and clothes of the patient, and the beds frequently changed.

Under this system of treatment, as pursued at Blookley, the mortality was about ten per cent., and during a part of the epidemic of 1847 it was as low as seven per cent.

In convalescence from typhus, the patient should be guarded with peculiar care. From the nature of the disease, an unusual relaxation of the whole system exists, and consequently a greater disposition to relapse from slight causes than in ordinary fevers. It is an important observation of modern pathologists, that when the general febrile symptoms have greatly diminished, the condition of the local malady by no means corresponds; that in the enteric form of typhus, the complete cessation of fever coincides with the time when the intestinal alteration becomes stationary. Experience has shown, that after six weeks, or even two months of apparent convalescence, a slight imprudence has renewed the entire inflammation, and diarrhæa, dysentery, or perforation and death have ensued. The appetite is generally keen at this time, but its demands must never be taken as a guide in the important matter of diet; the lightest aliments should be given during the first week of convalescence; gruel, chicken broth, well boiled potatoes, and, as strength increases, beef tea, roasted apples, the pulp of some kinds of fresh fruit, and the most digestible animal food, form a suitable regimen for the convalescent state.

Cleanliness, ventilation, and judicious exercise, are of the utmost importance. Dr. Johnson makes the following striking remark:—"Sick men recover health sooner and better, in barns, huts, and sheds, exposed occasionally to wind, and sometimes to rain, than in the most superb hospitals of Europe; pure air is, in this respect, alone, superior to all forms of care, and to all other remedies without such aid. When ground is gained by moderate diet, small in quantity, but stimulative of the powers of digestion, by exercises light but varied, and often repeated, it is effectually secured by the practise of washing the body in cold water, while the impressions of the active movements from the exercises and amusements, are yet in force. The application of cold water in such condition has a powerful effect. It produces a salutary action, and if followed by friction, and the refreshment arising from clean apparel, it gives and confirms a mode, which may be called the mode or tone of health."

The importance of the hygienic means here referred to, cannot be too strongly insisted upon. It is the duty of the physician to modify them in their application to individual cases, but the employment of similar means, both physical and mental, for the restoration of health, forms an important part of the treatment of disease.

The liability to relapse, is observed to vary in different epidemics of the same disease. Comparatively few cases occurred in the epidemic of '47. The secondary fever which accompanies the relapse, is sometimes complicated with erysipelas, diarrhæa, or dysentery. The most frequent causes of relapse, are errors in diet, over exertion, or neglected bowels. In directing the treatment during relapse, the exhausted condition of the patient must always be borne in mind, and the activity of ordinary treatment greatly modified. The nervous system is highly susceptible at this time, and it is found extremely advantageous to administer an anodyne, when purgative medicines are employed, particularly where signs of intestinal irritation exist.

We have thus seen that the Ship Fever epidemic presented nothing peculiar or mysterious in its history. As it sprang from the same causes, so it presented the same phenomena, as the ordinary typhus, which always exists, in a more or less degree, in the crowded alleys and dismal cellars of our large cities. When the laws of health are generally understood and practised:—when a social providence is extended over all ranks of the community, and the different nations of the earth interlinked in true brotherhood—then we may hope to see these physical evils disappear, with all the moral evils which correspond to, and are constantly associated with them.

ART. II.—*Injection of Tincture of Iodine into Suppurating Cavities.* By H. M. HARD, M. D., Milwaukee, Wisconsin.

The following cases, taken from my case book, illustrate in a striking manner, the utility of the above method of applying this valuable therapeutic agent.

July 4th. 1847.—G. J., a laboring man, applied to me with a disease in the axilla depriving him of the use of his arm. Three months previously he had received a penetrating wound in the axilla from a small stick, the wound had not healed—there had been a purulent discharge ever since. I found a tumor of the size of a large orange occupying the seat of the injury; it had a dark, dull red color—was very hard, and firmly adherent to the adjacent parts; several lymphatic glands, not connected with the tumor,

were enlarged, and indurated. The center of this tumor was perforated by a suppurating sinus, into which I passed a probe to the depth of three inches.

The previous treatment had consisted of various unguents, poultices, &c., from which he had derived no benefit. After cleansing the sinus by injections of tepid water, I injected the Tinct. of Iodine, and directed the Unguentum Iodine to be applied to the tumor twice a day. I used no other iodine injections on alternate days, continuing the unguentum, and in ten days the sinus had healed from the bottom, and the tumor diminished to the size of a filbert, which soon after entirely disappeared.

April 17th, 1848.—J. P, commander of a brig; received a severe, lacerated and contused wound of the scalp from the falling of a spar upon his head. The wound commencing upon the apex of the forehead, near the mesian line, and at the border of the hairy scalp, traversed in a semilunar direction the right side of the head, terminating near the vertex, forming a somewhat serrated incision nearly five inches in extent. The scalp upon the concave side of the incision was completely reflected, forming a flap as large as the palmar surface of the hand, the hemorrhage had been rather free, but had nearly ceased upon my arrival. The cranium was apparently uninjured. There were no symptoms of concussion or compression. I removed all foreign bodies from the wound, and brought the edges of the integuments accurately together by tying portions of the hair across the line of incision at proper intervals, removed the remaining hair for some distance around, and applied a compress and bandage, directing the part to be kept wet in a spirituous lotion. Ordered a brisk cathartic to be given in six hours.

April 19, 4 o'clock, A. M.—was summoned in great haste—found him delirious, with intense febrile reaction, face flushed, eyes deeply injected, pulse 110, full and strong, intense pain in the head, scalp much tumefied over the right side of the head including the forehead and upper eyelids, considerable swelling about both ears, with pain and stiffness at the angles of the jaw. This febrile disturbance had been gradually supervening during the night and previous afternoon, till it had arrived at the degree of intensity above described.

Treatment.—Bled him to approaching syncope, applied cold to the head, stimulating applications to the feet, and gave a brisk purgative of calomel and jalap. The usual antiphlogistic measures were energetically employed, and the inflammatory symptoms were soon controlled. The wound now commenced suppurating, and a large portion of the surrounding scalp

became oedematous, pitting upon pressure. The discharge of pus increased rapidly at each subsequent dressing, till, at the expiration of three days, over 3ii was discharged *per diem*, and, indeed, such was the activity of the suppurative process, that serious apprehensions began to be entertained for the safety of the entire portion of reflected scalp. There being but slight cephalalgia, and no vascular excitement, I at once determined to use the injection of iodine to control, if possible, the rapidly increasing suppuration. Consequently, f 3i, two thirds the ordinary strength, was thrown into the suppurating cavity. Fourteen hours afterward the wound was dressed, the discharge was found to have diminished nearly two thirds, and the color changed to a rusty tinge. The injection was repeated on alternate days. After the second injection there was very little discharge. The wound now healed rapidly, and in a very few days the reparative process was completed.

December, 1848.

ART. III.—A *Clinical Lecture on Diseases of Reflected and Sympathetic Nervous Influence. Delivered to the Medical Class of the Buffalo University.* By CHARLES A. LEE, M. D., Prof. of Materia Medica and Pathology.

Gentlemen,—I propose in the present lecture, to call your attention to some of the diseases of reflected and sympathetic nervous influence. Dr. Marshall Hall has probably done more to make us acquainted with this class of nervous diseases than all other writers together, and the facts and statements which I shall now make are chiefly the results of his investigations. I have already stated that he has shown that the contractions of all the sphincters, of the cesophagus, the glottis, the iris, the eye lid, and the regular action of the muscles of respiration, are sustained, independently of the will, by a nervous influence, conveyed by *afferent nerves*, from the respective parts or surfaces to the spinal marrow, and reflected from it through the *efferent nerves* to the muscles connected with these parts. This influence is called the *excito-motory power*. Now, as I have said before, pathology is morbid physiology, and we have but to suppose an increase of this involuntary excito-motory power, and we have disease,—*per se*; as in cases of spasm of the throat and sometimes of the sphincters, in hydrophobia, tetanus, and some hysterical affections. The hurried respiration, the convulsive cough, violent retching, and hiccough, which are occasionally presented in these and other nervous diseases, may also be in part traced to an undue influence of the excito-motory nerves of organic life

These actions are sometimes excited by sensations, as the respiratory acts, by a feeling of want of breath; cough, by tickling in the air passages; retching by nausea, &c.; but it is where there are no such sensations, or where they bear no proportion to the violence of the actions, that we are warranted to conclude that the excito-motory function is itself exalted. Here you are to remember that at the orifices of passages into the interior, there are peculiar kinds of sensibility connected with the functions of ingestion and egestion; and that these, when modified, constitute a state of disease. Thus the sensation of thirst is but a modification or 'exaltation' of the natural sensibility of the parts, where this sensation originates—and so of craving, nausea, tenesmus, and painful micturition—where the sensibility is impaired, you have anorexia, and paralysis of the rectum and urethra. Another very good example of this exaltation of the excito-motory functions, independent of sensation and volition, is exemplified in the voluntary muscles, when they are deprived of sensation and voluntary motion by disease in the brain itself, or cutting off communication between the brain and spinal cord, without materially injuring the cord itself. Thus in paraplegia from injury of the upper part of the spine, the excito-motory power of the nerves of the lower extremities is exalted, as you will find by tickling, or merely touching the soles of the feet, or legs; convulsive motions immediately are excited, although all voluntary power and sensation are wholly lost. You see the same phenomenon, on cutting off the head of a frog, and touching any part of the surface with a pin, contractions instantly follow—or you may destroy sensation and voluntary motion, in animals or persons, by opium or other narcotics; and then by pinching the skin, you excite spasm, or convulsive actions of the muscles. These experiments prove very conclusively the excited state of the reflex or spinal functions.

In a case of paraplegia, where sensation and motion were entirely lost, I have known the mere touch of the bed-clothes excite troublesome startings. In hemiplegia the same thing occurs, but not often to the same extent; as the cerebral influence is rarely so completely intercepted. Dr. Williams states he has known the convulsive motions of a paralyzed limb so violent in a hemiplegic patient, that it was necessary every night to fasten it down to the bedstead to enable the patient to get sleep.

Wherever you find convulsions, then, according to Marshall Hall, you are to refer them to irritation of the true spinal system. This physiologist has divided the diseases of the spinal marrow into three classes.

- I. Central diseases, or diseases of the true spinal marrow itself.
- II. Centripetal diseases, or diseases excited through the excitor nerves.

III. Centrifugal diseases, or diseases of the motor nerves.

Of the central diseases, or diseases of the true spinal marrow, itself, we have,

I. Inflammation within the spine—and this may be either of the membranes, or *spinal meningitis*, or

II. Inflammation of the substance of the cord, or *spinal myelitis*—and this may affect,

1st. The cerebral, or sentient and voluntary tracts.

2nd. The true medulla.

3d. The principal divisions.

The *causes* of inflammation within the spine, are various, such as blows, or falls, violent muscular efforts, exposure to damp and cold, intemperance, mental anxiety, intermittent fever, sexual excesses, &c. The worst case I ever saw, was brought on by lifting a heavy piece of timber—another was occasioned by lying on the damp ground.

In cases of meningitis of the spine, you generally find meningitis within the cranium, and it is extremely rare for the membranes of the spinal marrow to be affected, without involving the substance. Hence, these cases are all more or less complicated, making it difficult to define the symptoms peculiar to each. It is fortunate that accurate diagnosis here, is not essential to successful treatment. The locality of the inflammation, according as it affects the medulla oblongata, or the cervical, dorsal, lumbar, and sacral portions of the spinal marrow, is of very great importance. I have known cases, where the whole cord was affected, so that pressing over successive vertebrae, gave rise, first, to dyspnoea; second, to palpitations; third, to nausea; a burning sensation in the region of the stomach, and a sense of sinking. In meningitis, the symptoms are more those of irritation of the spinal marrow, or *spasm*; in those of *myelitis*, those of destruction of the organ, or *paralysis*. Both kinds, however, generally co-exist. One of the first symptoms of meningitis, is pain in some part of the spinal column, increased by the motions of the patient, but rarely by pressure over the spine. After a short time, however, the spine becomes tender to the touch, and this symptom will generally serve to distinguish it from myelitis, in which there is usually loss of sensibility. Again, we have spasm in *meningitis*. The head, neck, or trunk, is bent backwards—or there is trismus—wry-neck—opisthotonos, or contraction of the limbs, attended with much pain, or convulsions. Sometimes the respiration is difficult, or there may be constipation, and retention of urine,—the symptoms varying according as the meningitis occupies the upper, middle, or lower part of the spine.

In spinal *myelitis*, or inflammation of the substance of the cord, you find loss of sensation and voluntary motion, a sense of numbness—and feebleness—an impaired muscular power, either in the upper or lower extremities, or in both—There may be, even, augmented sensibility,—also spasms and convulsions—as the disease goes on, the loss of sensation and motion increases—generally the inferior extremities are first paralyzed, then the superior—in some cases, sensation is lost and motion retained—in others motion is lost, and sensation continues.

You will also find that when the disease occupies the upper parts of the spinal marrow, the respiration is impaired, and even the action of the larynx and pharynx becomes affected, and there is difficulty in swallowing, or even asphyxia. I lately attended a fatal case of *myelitis*, which resulted in perfect paraplegia of the lower extremities, with palsy of the bladder, and, where, on dissection, the disease was found opposite the second dorsal vertebra, and in this case, the most prominent symptom, next to a sharp, shooting, burning pain, running through from the spine to the sternum, was the sensation of a cord-like tightness across the epigastrium. When the *lower* part of the spine is affected, the bladder, rectum and their sphincters, are variously paralyzed; and there may be retention of urine, and constipation, or involuntary evacuations, or retention and involuntary flow of urine may be combined. You should always make it a point to ascertain the condition of the bladder and rectum, for as they are unable to evacuate their contents, artificial assistance will be found indispensable. The *morbid anatomy* of these spinal affections, is very similar to that of cerebral meningitis, and myelitis. You find, in spinal meningitis, injection of the pia mater, and of the spinal vessels in general, effusion of serum, lymph, pus, and blood, under the arachnoid, diffused, or in portions—or softening of the adjacent medulla. In *myelitis*, the principal morbid change is softening, which may occupy the whole, or only a portion of the spinal marrow—generally it is confined to the cervical or lumbar portions. When chronic, it is apt to result in induration. The most successful treatment of inflammation within the spine, consists in *cupping* in acute cases, and of *issues* and *setons* in the chronic. Cupping should be applied so as to answer two indications—those of local depletion and counter irritation; and for this purpose, the scarification should be applied deeply and crossed, and little blood should be drawn, the operation being repeated according to the violence of the disease, and the powers of the patient. In chronic cases, issues are indispensable—mercurials, as alteratives are, also, highly useful; the diet should be very mild, and moderate, the bowels kept open, and the

patient kept in a recumbent posture and quiet. There is one thing peculiarly noticable in these cases, and that is the state of the mind. In all diseases of the spinal cord, you will find the feelings more or less changed, or perverted. There is great loss of energy and buoyancy of spirit, despondency, melancholly forebodings, great anxiety on the subject of health, apprehension of some severe disease, susceptibility to emotions from slight causes, &c. Instability and fickleness characterize all their thoughts and actions. The bodily symptoms, in addition to those already stated, are disturbances of the digestive organs, as flatulence, costiveness, acidity, affections of the heart and circulation, as manifested in increased or irregular action, or palpitations of this organ; which is an extremely common symptom; derangement of the respiratory organs, as paroxysmal, dry cough, sense of suffocation, convulsive catching inspirations; a sense of sinking, fainting or prostration—accompanied sometimes with giddiness or tinnitus, restlessness or anxiety; in females hysteric paroxysms are a frequent consequence of a morbid condition of the spinal marrow. (In these affections mustard applications, or stimulating liniments, as Granville's lotion to the spine, are often very useful: also mustard pediluvia, and internal diffusible stimulants.) In addition to all these, gentlemen, you will often meet with a variety of anomalous symptoms, or occasional complications, such as a sense of throbbing over the whole body—cold extremities—profuse perspiration—chills and rigors, jaundice—affections of the sight and hearing—and derangements of the uterine, urinary, and hepatic systems. All these phenomena are to be taken into consideration, in making up your mind as to the proper treatment.

II. *Congestion* is another form of disease, of the true spinal system; but little is, however, yet known in relation to it, although I have no doubt it is often connected with certain anomalous affections, or convulsive, or hysterical paroxysms, without even being suspected by the physician. Where there is a sudden attack of this kind, without any permanent tenderness over the spine, or particular derangement of any of the important organs, we should be led to suspect congestion of the spinal marrow or its membranes. The treatment is the same as I have pointed out for inflammation of the spinal organs. *Spinal hemorrhage* also belongs to this class of central diseases of the true spinal system. You sometimes hear it called—*spinal apoplexy*; but this is a misnomer—a perversion of language. Apoplexy is the abolition of the functions proper to the brain—of sensation, voluntary motion, and thought. The terms—pulmonary apoplexy, hepatic apoplexy, and so on, should therefore never be employed, if we

wish to use words in their proper signification. In cases then of spinal hemorrhage, you will have *pain* in some part of the spine; *convulsions*; *palsy*—the very same symptoms, you perceive, as attend inflammation of the cord and its membranes. It is a rare affection—I have never seen but one case of it in a girl of thirteen, brought on by sudden violent movements of the neck. Dr. Abercrombie has met with only one case of it, and Dr. Bright has never met with it. The symptoms are, sudden pain in the back; spasms; loss of sensation and motion in the lower extremities. The *suddenness* of these symptoms, is the principal circumstance, which will lead to a correct diagnosis.

III. *Centric Convulsions or Epilepsy*.—Marshall Hall remarks, that *any* disease within the cranium or spine, whether effusion, tumor, exostosis, &c., may induce convulsions or epilepsy; while at the same time he maintains that *all* convulsive diseases are diseases of the spinal marrow, and of course that epilepsy is one of these. He brings forward the fact that epileptic convulsions are sometimes excited by *fright* or other mental emotions. This would certainly seem to show that it originates sometimes in the cerebrum, for this is the centre of all the moral emotions and passions, as well as the intellect. We also know that it is occasioned by tumors or exostosis, by which pressure is made upon the brain, or by depression of the bone from external violence—here again the cause acts upon the brain. Now every practitioner is aware that epilepsy is often occasioned by worms, or other sources of irritation seated in the alimentary canal, and one of the worst cases I have ever attended, was owing to the use of alcoholic stimulants. Hence then we have two species at least; one in which the disease originates in the nervous centres themselves, and especially the brain—the other, when it originates in some other part. These two species may be called *centric* and *eccentric*. *Centric*, when the cause lies either in the brain or spinal marrow—the two great nervous centres. *Eccentric*, of course, when the cause is external to these.

IV. Another disease, belonging to the *True Spinal System*, is *Paralysis agitans*. This may be either *general* or *hemiplegic*. It is an affection which if you have once seen, you can never forget. There is a perpetual tremor, even when the part is supported, the head, hands, legs, &c., go incessantly; the patient loses his balance in walking, and is in constant danger of falling forwards; and in order to avoid this he runs or moves with a quick pace, or on his toes. I once was acquainted with a most severe case of this disease in New York, in a man, who swam across the North river and back, just opposite Hoboken, for a wager; he won it, but he was attacked imme-

diately with this form of paralysis, and has labored under it ever since. This form of disease generally progresses with a steady pace, till it terminates in delirium, lethargy, and death. Another case in which I was lately consulted, was brought on by excessive sexual indulgence.

V. Another disease belonging to this class, is the *Tremor mercurialis*—a paralytic affection, common to workers in mercury, especially those occupied in silvering mirrors. Here we have paralytic tremor, debility, and probably ptyalism; imperfect articulation, imperfect command of the muscles in locomotion, constipated bowels, disturbed sleep, &c.

I. *Centripetal Diseases*.—The first of these noticed by Marshall Hall, is *Centripetal Epilepsy*: that is, when it takes its origin in the *excitor nerves* of the true spinal system, involving the axis of this system, and its motor nerves, in their turn; functionally merely, and not organically. This is the most frequent form of Epilepsy and it is curable; the patient has only to avoid its attack. Its causes are chiefly, 1. The presence of indigestible food in the stomach. 2. The presence of morbid matters in the intestines. 3. Uterine irritation. The first acts through the medium of the pneumo-gastric—the second and third through that of peculiar spinal nerves—all *excitors* belonging to the true spinal system—the *causes* acting through the *excitor nerves*, the *symptoms* being manifested through the *motor nerves* of that system. It does not fall within my province to give a particular description of the symptoms, or treatment of these diseases, but only to throw out such hints, as will aid you in forming a correct diagnosis, as it is not generally difficult to relieve disease, if you know its cause, its nature and its seat. I was recently summoned to visit a boy seven years old, who had fallen from his seat in school, in a fit,—on reaching the place, I found him stretched on his back on the floor,—the eyes wide open and rolled upwards, the pupils extremely dilated,—the right side of the face and body convulsed,—every muscle of that side being in constant convulsive jerks and twitches, while the left side was comparatively unaffected; the pulse was almost imperceptible—breathing exceedingly laborious—froth issued from the mouth—faeces were discharged involuntarily. I opened a vein and let the blood run to the amount of about ten ounces; and while it was running, the spasms became much more violent, but ceased after about one hour had elapsed from the time of attack. He remained about ten minutes free from spasm, when he was again seized, but the convulsive twitches, now, were confined to the left side, while the right remained unaffected. The distortions of the features were most horrible,—every muscle twitched and jerked, drawing the mouth

down to one side,—the flexors of the arm, fore-arm, thigh, leg and feet, were alternately contracted and relaxed, and respiration seemed absolutely suspended; there was the utmost danger that death would speedily result from asphyxia. The face became bloated, and livid, also the hands, and surface generally. This paroxysm lasted about fifteen minutes; when the convulsive actions ceased—consciousness, sensation and volition were not however restored till nearly two hours had elapsed, he lying all this time in a state of stupor; the breathing being stertorous and purely apoplectic. The mouth was filled with viscid saliva, which ran from it in a stream, respiration was much impeded by the quantity of mucus collected in the fauces. While he lay in this state, pinching, pricking, &c., excited no sensation. The cause, in this case, I attributed to worms. A mustard cataplasm to the spine, appeared to be the means of breaking the fit.

II. *Puerperal Convulsion* is also one of the diseases of the excito-motory function—and abortion and parturition, are considered, by Marshall Hall, as phenomena of the same system. The same remark applies to the sickness and vomiting attendant on early pregnancy. The principal causes of puerperal convulsions, besides the peculiar condition of the uterus itself, are indigestible food, a loaded or deranged condition of the bowels, distension of the bladder, mental shock, or anxiety, &c. This form of convulsion closely resembles epilepsy. The treatment varies in different cases, but we must aim at the removal of the causes.

III. *Tetanus* is another disease of the true spinal system. It may be *central* or *centripetal*—central, when it is produced by disease within the spinal canal itself—and centripetal, when it arises from an injured nerve, as in a lacerated, or punctured wound—or it may arise from irritation in the stomach and intestinal canal, as worms, &c. It is a common affection in hot climates, where it is occasioned by sudden changes of temperature and exposure to cold and damp. Infants sometimes are attacked with it, from the condition, it is said, of the umbilicus. In this affection we have what is called the *tonic* spasm, a sort of permanent rigidity, or contraction—on the other hand, *clonic* spasm is what I described as characterizing epilepsy, where the contraction of the muscles takes place repeatedly, forcibly, and in quick succession, the relaxation also being as sudden and frequent. These two kinds of convulsions may be mixed together in the same disease, but it is well to keep the distinction in mind. I have treated several cases of this disease, and I have always found the spasms first effect the muscles about the neck, then those which are concerned in mastication

—when the jaw becomes set, or there is *trismus*—next the muscles of the pharynx, and the deglutition becomes difficult. Next the muscles of the back and of the limbs, are contracted, producing a state of opisthotonos, the cerebral system all the while remaining unaffected. In all the cases of trismus which I have examined after death, and they have been several I have found congestion or inflammation of the cord, and its membranes, and in one instance, an injected state of the nerve, leading from a wound in the foot to the spine. The proper treatment of this affection, is as yet empirical; some recommend cups to the spine, followed by external stimulants, combined with powerful internal stimulants and tonics. The internal use of strychnia has been followed with success in several cases which have occurred in the city of New York, during the last few years, which may be found recorded in the New York Journal of Medicine. Five or six of these were undoubtedly cases of true traumatic tetanus, and they recovered under the use of strychnia; 1-16 of a grain every two hours. I have known of some cases, however, where this treatment has entirely failed.

IV. *Hydrophobia* is another of the *centripetal* diseases of the true spinal system—that is, arising from causes acting at a distance from the nervous centres. This affection arises from the insertion of a poison in the substance of the fine fibrillæ of the excitor nerves—the symptoms manifesting themselves, after a longer or shorter period, depending on circumstances, of which we are entirely ignorant, and all belonging to what Dr. Hall has described as the excito-motory functions. They consist in a peculiar spasmodic and terrible *dysphagia* and *Dyspnœa*,—the parts affected, being those which preside over ingestion. Here, gentlemen, the tri-facial nerves in the face and fauces, and the pneumogastric in the larynx, appear to be most unduly impressible. The impression upon these nerves is reflected upon the muscles of the pharynx and larynx, and the sense of dysphagia, or of dyspnœa is overwhelming. Here, also, the mind often remains clear till towards the last, when delirium sets in, thus proving that like tetanus, it is purely a disease of the true spinal, or excito-motory system.

V. *Hysteria* is another of the *centripetal* or *eccentric* diseases of the true spinal system.

This is a truly protiform affection, depending sometimes on the state of the stomach and bowels, sometimes on the condition of the uterine system, and frequently it arises from mental emotions, as grief, terror, anxiety, &c. It is a disease which seems to single out and affect every organ, and every function which belongs to the true spinal system. The respiration, the circulation, the secretions, all are modified by this singular affection. You

find the irritation in one case reflected upon the larynx, producing symptoms resembling croup, and apparently threatening suffocation—in another, upon the pharynx, causing dyspnoea, or difficult deglutition—in another, upon the respiratory organs, causing dyspnoea, cough, hiccough, retching and vomiting, &c.,—or upon the bladder, causing dysury, or retention of urine,—or upon the muscular system, giving rise to trismus, tetanus, and spasms, convulsions of every sort—the marvellous phenomena of animal magnetism, are, generally, nothing more nor less, than the morbid manifestations of hysteria.

VI. *Spasmodic Asthma*.—If you attempt to inhale carbonic acid gas, the larynx is instantly closed, through the agency of the pneumogastric or internal excito-motory nerve, as Mr. Hall calls it. The same occurs in the Thymic Asthma, or the crowing inspiration of children, which has sometimes been called laryngeal asthma. In all these cases, the morbid phenomena can only be explained on the principle of *reflex action*. Now suppose you are subject to asthma, and you inhale the powder of Ipecac, it is immediately brought in contact in the bronchi, with the branches of the pneumogastric, or internal excito-motory nerve. The action is reflected by the medulla oblongata, to which the sensation is conveyed, upon the motor branches, and probably upon the circular muscular fibres of the bronchial tubes, which immediately contract, and the phenomena of asthma are produced. Indigestible substances taken into the stomach, and feculent matters retained in the intestines, produce the same effect by their influence upon the incident spinal nerves. Contracted bronchial tubes explain all the phenomena—the dyspnoea—the urgent, rapid, imperfect, bronchial inspiration—the protracted wheezing bronchial expiration—the bronchial rattles under the stethoscope, especially during expiration—the secretion of mucus—the cough, &c., &c.

This pathology furnishes a clue to the *modus operandi* of the inhalation of ether, chloroform, the smoke of tobacco, stramonium and other narcotics. These relax the spasmodic stricture of the bronchial tubes. But how, you ask, does hydrocyanic acid, and other sedatives act when taken into the stomach. They also relieve, by their sedative influence over the true spinal nerves which are morbidly excited; and thus prove remedial. Tonics relieve in spasmodic affections on a different principle—they increase the tonicity of the muscles, and put them in a condition less disposed to take on convulsive action. You are aware that excitability is usually proportioned to the debility of the system—hence, very delicate females, are very impressible—very subject to hysteric convulsions. Raise the tone of

the muscles,—increase the general strength, and you relieve this condition, and remove the predisposition to spasm. But to return to *Asthma*; in all cases, the first thing to be done is to remove the exciting cause. If the patient has eaten some indigestible food, and this often brings on an attack, give an emetic; if there is irritation in the intestinal canal, give a cathartic, and aid its operation by a stimulating enema; saturate the atmosphere of the room with moisture, by boiling water over a spirit lamp, or on a stove, if there be one, and apply a fomentation to the chest. By these means, or a dose of morphine, the attack will generally be relieved—that is if the case be one of pure spasmodic asthma. There are asthmatic symptoms depending on lesions of the heart and large vessels, and of organic disease of the lungs, which can only be relieved by relieving the organic changes on which they depend, which of course is out of our power.

VII. *Tenesmus* and *Strangury* are excito-motory phenomena, produced by various irritative causes, as inflammation of the rectum, calculus of the bladder, and even teething in children. They are to be relieved by removing the cause.

VIII. *Sexual Excess or Abuse*.—These are prolific sources of suffering and disease, affecting not only the generative organs, themselves,—but, in many cases, the true spinal system, the cerebral system, in short the whole economy. I know no more prevalent cause of disease than this, whether in male or female, and I have known instances where the practice of self-abuse commenced at two years of age, the child having been taught the practice by its nurse. I have known the health of a little girl of six years, ruined by the practice, which she was taught by an apprentice boy, who lived in the family, and who used to irritate her genital organs with his fingers, as she sat on his lap. These cases, gentlemen, are examples of those that not unfrequently occur in childhood. There is here no instinctive want to gratify—the child is actually trained to the habit by others, till, when the habit is established, like all other habits, it is next to impossible to break it up. Hence the great importance of knowing the moral characters of nurses, and other early companions of children, that their minds be not contaminated with lascivious thoughts, and their constitutions ruined by injurious practices.

A few of the effects of self-pollution are, loss of strength—of flesh, and of digestive power—loss of mental energy, with despondency of the most deplorable kind, and imbecility of mind—extreme debility and emaciation, (tabes dorsalis) phthisis, cachexia, and insanity or idiocy. The reports of our lunatic hospitals, show that large numbers of both sexes are deprived

of their rational and moral faculties, by means of this most destructive vice. Excess and abuse of the genital organs induce every kind of derangement of the bladder and kidneys, involving derangement of the stomach, general debility and emaciation, with a host of anomalous symptoms.

All these dreadful results are occasioned by the influence which such abuses exert upon the spinal marrow, deranging by reflex action all the organs and functions, depending on this great nervous centre.

In some of these cases, the whole surface of the body acquires a morbid sensibility, so that the slightest touch of the bed-clothes, will cause a shudder, or even an emprosthotanic spasm, with a slight sob. The remedies for such a state of things are temperance,—a mild but nutritious diet,—active exercise and recreation—regulated thoughts—early hours—salt water shower baths—tepid at first, afterwards cold—cold dash to the loins and genital organs, with moderate cutaneous friction—and iron combined with some vegetable bitter extract internally.

IX. *Abortion* is probably an *excited act* in a generality of cases, and a knowledge of this fact is very important in a prophylactic point of view. You know that it is very apt to be occasioned by a severe attack of dysentery, or cholera; here, irritation is transmitted by the spinal nerves which supply the mucous membrane of the intestinal canal to the spinal marrow; and then contractile efforts are set up by the reflex motor influence which is sent out to the uterus, as well as to other organs. The same thing happens from the irritation caused by the presence of a dead fœtus in the uterus; and in this manner puerperal convulsions are occasioned in such circumstances. One of the most frequent causes of abortion in the early months after marriage, is sexual excesses. I believe nine cases out of ten, happen from this cause—and you know when once occasioned, it is very apt to occur from the operation of similar causes, less in excess, and even from the influence of habit. The grand principle of treatment in these cases, gentlemen, is to avoid impressions upon the *excitor nerves*; uterine contractions—without which abortion can not take place—will not be instituted, unless these nerves are irritated.

You perceive how different is the case with the uterus, and the bladder and rectum. If the former be excited to contractile efforts, its contents are expelled—if the latter, they are obstinately retained. I agree with Dr. Hall that the whole question of abortion and parturition is one of the true spinal system, and we must study it under this aspect if we wish to advance our diagnosis and treatment.

Incontinence of Urine, so often met with in young persons, depends on a

loaded state of the large intestine, or an acrid condition of the urine, and may be cured by mild aperients, with demulcent enemata, and by the use of diluents containing a small quantity of bicarbonate of potash. Children, troubled with this difficulty, should eat no supper, and the dinner should be early so that digestion will have been accomplished before bed-time. *They may take a small quantity of nuxvomica or opium at bed-time.* To ten drops of Tincture of Catharides at bed-time.

III. *Centrifugal Diseases*.—There are certain affections which are diseases of the reflex motor nerves, which Marshall Hall has described under the name of Centrifugal Diseases. Those spasmodic complaints, which originate from causes affecting the *excitor* nerves, and the *spinal* axis, according to this pathologist, I have already enumerated; it now remains briefly to mention those which belong to the latter division.

I. *Spasmodic Strabismus* belongs to this class. You are aware that strabismus may arise from *paralysis* of the cerebral and voluntary nerves, or of some of the muscles of the eye-ball. This variety, which Mr. Hall first pointed out, arises from an affection of the roots of the motor nerves of the true spinal system. In the former kinds of strabismus, the patient can move the eye well enough in every direction but one—where, at a certain point, the eye-ball stops; here the motions of the eye may be perfect, except on certain occasions of excitement, or of disorder, or of intense application, or of employment of the eye; the strabismus then becomes apparent; the eye-ball is evidently drawn in one particular direction. This affection is relieved by dividing the contracted muscle.

II. *Spasmodic Tic*.—Distortions of the face, when permanent, you are aware, arise from paralysis or spasm,—and this may have its seat in the cerebrum, or in the facial nerve. In *hemiplegia*, for example, the eye-lids of the paralytic side are closed by an act of volition, although not so perfectly as those of the unaffected side; the *sensibility* is generally diminished; the *tongue* is protruded *towards* the paralytic side, by means of the contraction of the unaffected side of the genio-hyoid muscle. When the *facial* nerve is paralyzed, the eye-lids can not close at all—the sensibility of the face and the movement of the tongue are natural. Now in the *spasmodic tic*, the countenance is *drawn* to the affected side; and it is the eye of the *same* side, which cannot be closed. This circumstance distinguishes it from *paralysis* of the facial nerve. Sometimes spasmodic tic is attended with defect of vision. Occasionally, the *tic* is confined to the outer portion of the orbicularis muscle. The *causes* of this affection are the usual causes of inflammation; the most frequent, perhaps, is exposure to a keen

wind—either extremely cold, or with rain, or sleet. I know of no specific for this disease. The case must be treated on general principles.

III. *Spasmodic Torticollis*, or wry-neck, is nothing but a spasmodic affection of the sterno-cleido-mastoid muscle, and is precisely of the same character as the spasmodic strabismus, and spasmodic tic—an affection of the *true spinal motor nerves*. This is a very common phenomenon after scarlet fever, sometimes becoming permanent, and requiring for its cure a division of the fibres of the muscle. I lately attended a case, brought on by a blow on the side of the head with the fist. Two brothers were at fisticuffs, when the older struck the younger, about eight years old, on the side of the head over the parietal bone, and knocked him down. The head was immediately drawn down towards the right shoulder, the face being turned about a quarter of a circle to the left, and thus remained for two days, when the muscle relaxed, as suddenly as it had contracted, and so remained.

IV. *Spasmodic Respiration* is another of the centrifugal diseases of the true spinal system, which you will find particularly described in Sir Charles Bell's work on the Nervous System.

There are certain diseases of the nervous system of remote origin, which are of great interest and practical importance to the physician and to which I can only allude very briefly. They are—1st, *Intestinal Irritation*, occasioned by indigestible food, scybala, or other morbid contents of the stomach and bowels, excited into activity by some shock of the system, as a fall or other accident, parturition, &c. It is attended with rigor, frequently, severe heat of surface, violent pain of the head, with intolerance of light and sound; in short the symptoms are those of encephalitis. The breath is also very offensive, and the tongue thickly furred, and every thing indicates a morbid state of the secretions,—this will help you very much in forming a correct diagnosis; for these symptoms are not apt to attend simple encephalitis. The best and most effectual way to get rid of scybala, is very copious enemata, passed up with the long tube into the colon, and equal parts of castor oil and turpentine internally as a cathartic in ounce doses for an adult. I have mistaken such cases, gentlemen, for inflammation of the brain, and so have, probably, most physicians; and it has been recommended to apply Marshall Hall's test, of bleeding the patient in an erect position, in order to ascertain the degree of tolerance of blood-letting, and thus be able to determine the nature of the disease. Where the symptoms are occasioned by intestinal irritation, you are aware

that the patient will faint from the loss of a very small quantity of blood, while the reverse happens in idiopathic inflammation of the brain.

Gastric irritation is a very frequent cause of convulsions in children. I lately attended a child who was attacked with severe convulsions after being fed with a considerable quantity of cows milk. I got down an emetic, and the child, about two years old, vomited up a piece of solid curd or cheese two inches long and an inch thick. The child had no more spasms, and there can be no doubt that this was the cause of the attack. In another case a small piece of *ham* brought on a severe fit. Andral gives the following case in his Clinic: A middle aged man, 4 days before his entrance into the Hospital, was seized with bilious vomiting, epigastric pain and fever. In 24 hours after the invasion of these symptoms, he first perceived a difficulty in depressing the lower jaw, and a violent trismus was established—which continued for the two following days. At the end of this time he entered the hospital in the following state. Trismus, the head drawn back and forcibly retained in this position by the muscles which are inserted into the occipital region; rigidity of all the extremities; abdomen hard as a board; intellect perfect. Notwithstanding the trismus, the patient could articulate with sufficient distinctness, to give the above account of his case. From the time when the first tetanic symptoms appeared, the vomiting and epigastric pain ceased. He died on the evening of admission. On dissection, no appreciable alteration of structure was found in the brain, or spinal marrow; the meninges of the brain, were very slightly vascular, but those of the spinal marrow pale. The whole surface of the stomach presented an intensely red color. The remainder of the digestive tube was perfectly healthy, and the other organs natural. Here, gentlemen, you have tetanus from gastritis. This is a very instructive case. But you often see spasms, of the most violent kind, in drunkards from the same cause—irritation of the stomach—or rather inflammation, for in most of these cases we have inflammation.

Under this class would also fall—II. *Exhaustion from loss of blood.*—Here you have throbbing pain in the head, or a sense of pressure as if the brain were bound tight with an iron hoop—intolerance of light and sound—sleeplessness—a state bordering on delirium—or even delirium and mania; convulsive affections—perhaps epilepsy itself. In some aggravated cases there will be amaurosis, deafness, paralysis, coma, and even apoplexy. When you find, gentlemen, that this state of things is aggravated, instead of being relieved by blood-letting, it furnishes a very good hint, I think, to stop, and turn about—try a little brandy, ammonia, or animal food,

with chalybeates. In this way you will often save your patients, when otherwise they would have died of course. And yet so infatuated are some physicians, that I have actually known cases, where the bleeding has been repeated as many as ten or twelve times within a few days, and each time with an aggravation of all the symptoms, and the patient has at length died, and the physician has said that the patient was unable to bear the treatment necessary to cure him—or the disease was cured, but the patient was too weak to recover—or, some other disease set in and carried him off. So easily do we find excuses to justify ourselves and quiet our consciences, when we are actually guilty of homicide—not intentional, I admit, but scarcely less criminal. At first the symptoms, in exhaustion from loss of blood, are entirely cerebral—next they are partly cerebral, and partly belong to the true spinal system, as the half-closed eye-lid, the convulsions, the stertor, &c. Next the ganglionic system becomes involved, and mucus accumulates in the bronchi, and serum in the air-cells and cellular substance of the lungs; and flatus distends the intestines. After death, you will find effusion under the arachnoid, and at the surface and base of the brain, and into the ventricles; cedema of the lungs, intestines, &c. *Treatment*,—exercise, pure air, nutritious diet, vegetable and mineral tonics, aperients, &c. There are other affections connected with this state of the brain, which I have not time to notice more particularly here. These are *Chlorosis, Arthritis, Shock, mental and physical; the Effects of Alcohol, Dropsies, Ischuria, &c.* I may perhaps refer to some of these hereafter.

I have dwelt thus long upon the diseases of the spinal system, because of their great importance, and because their pathology, the offspring of modern science and research, is in the highest degree interesting. You know that these views are very different, from what you find laid down in medical works, and I have no doubt you will agree with me in the opinion that they are far more satisfactory. Thus it is the general doctrine of the books and the schools, that these morbid sympathetic movements or phenomena, are due to the direct nervous connexion, which the great sympathetic nerve establishes between the respective organs; but you perceive that this supposition assumes, what experiment has not proved, that the ganglia of this nerve are either centres of reflection, or sources of nervous influence, which is altogether inconsistent with the latest researches. It is far more probable, and indeed we may consider it established, that the spinal marrow is the centre of reflection in these as in all the other examples of reflex action, which we have been considering, although the sympathetic may be, in many instances, the medium of communication. I advise

you, gentlemen, to experiment on this subject for yourselves; you can settle many important principles in your mind in this manner—which without such experiments, would be held as merely loose, hypothetical speculations.

Take a frog or a turtle and decapitate it, then irritate a portion of the exposed spinal cord, and you witness strong contractions of the extremities; now apply this to the human subject; if you see spasms of the limbs, or any other part, will you not, as a matter of course, refer them to irritation within the spinal canal? Or, take the same frog or turtle, and irritate any of the spinal nerves in any part of their course, you have again spasmodic contractions of the muscles of the limb, not only of that side to which the nerve belongs, but also of the other. Here, you perceive, there is no volition, for there is no brain, there can be no sensation in the ordinary meaning of the word—yet you have motion—convulsive motion it is true, but nevertheless motion. Now, what hinders you from applying these physiological facts in explanation of pathological phenomena? Do you not perceive that they throw a broad flood of light upon diseases, which have hitherto been veiled in almost impenetrable mystery? Take the *tonic* spasm of tetanus, you say at once, as the legitimate result of these two experiments, here then I have the true explanation of the pathology of this singular disease. I see this spasmodic condition may be owing either to a diseased state of the spinal marrow itself, or to a morbid condition of the nerves belonging to it. Here is a lacerated wound, or a man has trodden upon a rusty nail, I see that an irritation has been set up at the extremity of certain *incident* nerves. This irritation is conducted along these nerves to the cranio-spinal axis, in which a process or change takes place, whereby an answering influence is reflected to the muscles along the motor nerves; and we have tetanus. But in your experiments on the frog, you found that pinching one of the denuded spinal nerves, not only set both hind legs in motion, but also the fore legs, thus exciting spasmodic actions *above* as well as *below* the junction of that nerve with the cord. You then infer, for you see the fact demonstrated before your eyes, that the change, whatever it be, that is wrought in the cord by impressions made on one of its afferent nerves, is not necessarily confined to the corresponding *segment* of the cord; but is communicated in both directions through its entire course; the whole of this centre of the excito-motory system responding to the influence conveyed by a single nerve, as completely as a tight string vibrates from end to end, when struck at any one point.

This pathology furnishes us with a satisfactory explanation of some sympathetic sensations, which, otherwise, would remain entirely inexplicable.

How else can we account for impressions made on the ultimate distribution of one nerve producing sensations in parts supplied by another nerve, or by another branch of the same nerve—as when you cause a tickling sensation in the glottis by touching the external auditory meatus. On this principle only can we account for the well known fact that a calculus in the bladder produces pain at the extremity of the penis; or ascarides in the rectum, itching of the anus, or pudendum; or congestion of the liver, pain at the top of the right shoulder; or a disordered state of the stomach, pain in the left shoulder-blade. Why, in angina pectoris, do we have pain extending *down* the arms; or in painter's colic, pain in the legs and feet; or in gastric derangement, headache, &c? In these and other instances, that might be mentioned, the sensations can not be referred to direct nervous communication, but to an influence reflected from the spinal centre only.

I shall here leave this subject, which is full of the highest interest to the pathologist, with the hope that what I have thrown out—and I am aware that they are merely hints—will be the means of calling your attention to it hereafter, when you are engaged in the practice of your profession.

ART. III.—*Reminiscences of the Cholera in 1832; its Pathology and Treatment.* By W. W. REID, M. D.

It is not our intention to write a treatise on cholera, but simply to give a brief sketch of its incursion into this State, and of its characteristic, or more prominent phenomena. From these we hope to be able to determine its true pathology, and from thence deduce a rational mode of treatment. Much has been written on cholera, and very divers and contradictory methods of treatment recommended. How could it be otherwise? How could we have fixed principles of treatment, when most writers admit that we know nothing of "the nature," or pathology of this disease? During the prevalence of the Epidemic, in the haste, anxiety, excitement and confusion that occupied all minds, most practitioners were, in some sense, compelled to prescribe for *symptoms*; each one saw from a different point of view, and therefore adopted different remedies, and about the same success attended all. Hence, *sequences* were mistaken for *consequences*. It was only after the Epidemic had ceased, and all excitement subsided, that we had time to look back, carefully collect and compare the facts, and thus distinguish the *real* from the *apparent*.

The winter of 1831-2 was one of the coldest known for many years in Western New York. The spring was also cold and late. The diseases

prevalent during the winter and spring in Rochester, were measles, scarlet fever, and small pox. As the season advanced, our usual Intermittents made their appearance, presenting at first no uncommon features. But about the first of June, they began to be attended by a troublesome looseness of the bowels. And many cases occurred that were ushered in by violent vomiting and purging, amounting to cholera morbus. When this was arrested, reaction, or fever, followed, and the succeeding paroxysms would be attended by the ordinary chill. By degrees our Intermittents disappeared, and diarrhoea and cholera morbus usurped their place. This was during the latter part of June and the first of July. Early on the morning of the 12th of July, a stranger direct from Albany, via the canal, arrived in town. He had been sick *three days with diarrhœa*. He took some pills composed of mandrake root and extract of butternut bark, prescribed by a Botanic Doctor. He was soon after seized with vomiting and purging, and died before 10 o'clock at night. On the 14th, two other strangers from abroad, were taken sick, and died the same day. No more cases occurred till the 23d, when two of our own citizens were taken and died. From this time, till the 16th of August, the Epidemic increased in violence and fatality, when it began to decline, and on the 7th of Sept. the Board of Health reported that it had subsided. But during the whole season diarrhoea and *cholera morbus* were rife, running "*pari passu*," increasing and declining with the Epidemic Cholera, and did not entirely disappear till October. The same condition of things existed in other cities and villages, and to some degree, in the country generally.

The Quebec Board of Health made their first Report on the 11th of June, 1832, from which it appears, that the Epidemic broke out at Grosbe Isle and Quebec on the 9th inst. The Montreal Board reported on the 13th, that there had been fifteen cases, and seven deaths, in that city. At this time it was prevalent in St. Johns, Sorrel, Laparre, and Prescott. Thus, in four days time having invaded all those places, as was supposed. But some of the physicians of Montreal, assert that there had been several cases as early as April.

The New York Board first reported on the 4th of July, and from this we learn that the first fatal case was on the 27th of June. In subsequent reports we are informed that diarrhoea, and, what was considered at the time, *Cholera Morbus*, prevailed extensively throughout the city. The United States Gazette of the 4th of July, mentions "the report of Cholera in Philadelphia, *believed to be, however, nothing more than the common cholera morbus.*"

The Medical Staff of Albany say in one of their reports, "although but few deaths took place from the 20th of June to the 3d of July, there was considerable sickness, and experienced physicians foresaw the coming danger in the *unusual prevalence of diarrhœa and common cholera morbus.*"

Dr. Rhinebeck, of N. Y., visited Canada for the purpose of witnessing the character of the Epidemic. On his return he addressed a letter to the New York Standard, under date of July 1st, in which he says: "The disease is Epidemic—it is atmospheric, and appears to obey the same laws as influenza. * * * Every person in these Provinces (Canada,) was affected by the same premonitory symptoms, viz: pain in the region of the stomach, a burning sensation in the bowels, and a fulness or expansion of the abdomen. *These feelings were universal, and I may safely say, not one person escaped them.*"

Dr. L. B. Beck, appointed, by Gov. Throop, General Health Officer, went to the frontiers on the north, to make farther inquiries in relation to Cholera. He wrote as follows:

• WHITE HALL, July 14th, 1832. •

To His Excellency Gov. Throop:

SIR:—I arrived here this morning, having visited on my way the Board of Health of Troy, Waterford, Schuylerville, Fort Edward and Fort Ann, and made such inquiries of the medical gentlemen of those places as I considered necessary to a complete history of the Cholera in this State. * * The information which I have received on my route seems to me to *prove conclusively, that the disease now prevailing at Albany, was not brought there by emigrants.* Complaints of a character similar to those which have prevailed so extensively in Albany for some weeks, *have been, and still are, equally general in all places which I have visited.* All other diseases appear to have been merged in this. Indeed, this is so much the case, that at Mechanicsville, Fort Ann, and White Hall, where intermittents have usually been very rife at this season of the year, few, if any, cases have occurred. Most of the physicians of whom I have made inquiries *have (had?) repeated cases of what they considered at the time unusual forms of common cholera morbus of the country.* They are characterized, in some instances, by severe and general spasms, and a coldness of the extremities—a peculiar sharpness of the features—violent pain in the region of the stomach—vomiting and purging of a limpid or nearly limpid fluid, and a more or less discoloration of the skin. *These cases have occurred among residents who were not known to have any intercourse with emigrants, as well as among those who have been engaged on the canal.*"

From these, and a multitude of similar facts that might be adduced, we think, the following conclusions may be justly drawn:

First.—That the primary cause of Epidemic Cholera, was either solar, sidereal, lunar, atmospheric, electric, or telluric; operating generally on all persons within its sphere of action, but affecting different persons differently according to age, sex, temperament, habits, exposure, &c. The exciting causes were various; such as heat, filth, damp and crowded apartments, unwholesome food, intemperance, and the like.

Second.—That the Cholera was not imported—was not, therefore, Asiatic Cholera, which is a misnomer—but was indigenous, and was, strictly speaking, Cholera Asphyxia, which will appear more fully as we proceed in our enquiries.

Third.—That in no just sense of the term was it contagious—that it was not propagated by some virus generated *per se* and communicated from person to person, but by some subtle general agent, pervading the atmosphere, and extending over large districts of country.

Fourth.—That all Quarantine restrictions and regulations were not only useless, but injurious.

Respecting the diarrhoea which preceded, accompanied, and continued some time after the disappearance of fatal cases of Cholera, there were several peculiarities worthy of special notice.

First.—In most, if not all instances, it was attended by a sense of weight in the abdomen, most patients describing it as “a ball about the size of his two fists,” which was always more sensibly felt after eating, and aggravated by a mis-step, or fall, received in walking.

Second: No case of Cholera occurred without this diarrhoea preceding it from three or four hours to three and four days, and sometimes weeks. We took particular pains to determine this fact, and we very much doubt whether that case has ever yet occurred without it. As the medical journals and public prints had not at that time mentioned, or dwelt on this important circumstance, but always spoke of attacks of Cholera as occurring suddenly, and lasting but a few hours, we were quite surprised when, in our own practice, we met with no such case; for we were prescribing for twenty cases of diarrhoea and cholera morbus, when we were for one of Cholera Asphyxia, and every case of Cholera was ushered in by a diarrhoea of *several days' continuance*; hence; when we heard it reported in town that such and such a person was perfectly well, till such an hour, when he was suddenly seized with Cholera, and in six, eight or ten hours was dead, we forthwith went to the family, and inquired into the

matter, and in every instance found the report erroneous. The mistake always arose from the fact, that the diarrhoea being attended with very little inconvenience, the patient kept about his ordinary pursuits, and made no complaint till seized with vomiting and purging, which alone attracted attention, and was called Cholera, the diarrhoea being only *premonitory, no part of the disease*, and not worth mentioning, in the estimation of ordinary observers.

Third: The tongue had a thick, swollen appearance. The surface was covered with a third white, milky coat. The substance of it had a livid color.

Fourth: The pulse was preternaturally slow, ranging in adults from 40 to 60 per minute. This fact was verified by hundreds of observations. The slow pulse and livid tongue were noticed in many persons, who had no other symptoms of the Epidemic; suffered no inconvenience, and considered themselves in ordinary health.

Fifth: There were spasms of the muscles in the soles of the feet, calves of the legs and palms of the hands, also a cold clammy perspiration especially in the night when in bed. These symptoms, likewise existed in many instances without the diarrhoea.

Sixth: But the most important peculiarity noticed was in the quality of the blood itself. Even early in the season, when for any cause blood was drawn, it was observed to be unusually dark and heavy, and when allowed to cool, the coagulum was found to be disproportionately large, compared with the serum, and as the season and the Epidemic influence progressed, this disproportion and dark color, gradually increased. This fact, like the slow pulse, was more marked in decided cases of diarrhoea and Cholera, but was often very striking in persons, who had neither. These phenomena were common long before Cholera made its appearance.

If, to the foregoing, we add the appearances on dissection, after death by Cholera, we believe that we shall find a manifest and satisfactory solution of all the phenomena of both diarrhoea and Cholera asphyxia. In other words, we shall have the pathology of the disease, and consequently, the indications of *rational* treatment.

The appearances on dissection are not uniform, and there are, of course, discrepancies in the descriptions of different observers; but this is true of many other diseases. But in one great general fact all agree, viz:—The very great amount of congestion of the mesenteric and portal vessels, and those of the abdominal viscera. The chain of causes and effects seem, then, to be in the following order:—A subtle, unknown, morbid agent

operated insensibly on the system for a greater or less period; slowly or more rapidly according to its intensity, rendering the blood thick, that is, destroying the normal proportion between the crassamentum and serum. Thus the circulation became more difficult and tardy; hence the slow pulse. But as the circulation became slower, of course the function of the lungs was performed less perfectly, and hence another cause of deterioration; the blood not being sufficiently relieved of its carbon, became still blacker and heavier. And thus the power to generate animal heat was impaired, and hence the cold and clammy skin. Up to this point, no link in the chain of causes seems wanting. But between those just enumerated, and that next, there is one or more lost. After the preceding symptoms have existed for an uncertain time, there begins, by degrees, to be congestion of the portal and mesenteric vessels, slight at first, but gradually increasing, and, as a consequence to this congestion, we have occasional pains in the abomen, borborygmus, uneasiness after eating, or sense of weight in the bowels, and a *livid swollen tongue*. But the congestion increases, and now we begin to have diarrhoea, when all the other symptoms are more or less aggravated. *This constitutes the first stage of Cholera*, and not the premonitory, as it was most erroneously called. It may continue longer or shorter, according to circumstances—as age, sex, habits, exposure, constitution or *treatment*. In hundreds of instances it will be not only the first, but last and only stage: the constitution being adequate to resist and overcome all further influence of the primary morbid agent of Cholera, and health be gradually restored. But if from predisposition, or mismanagement, or the more intense action of the Epidemic cause, this congestion proceeds to another degree, then, the serum, already too scanty, begins, in consequence of the more and more obstructed circulation in both the large and capillary vessels, to be forced, as it were, through the follicles of the mucous membrane, into the stomach and intestines, large and small. And now commences what has been termed *vomiting and purging*. This is the beginning of the second stage, which may last from three hours to thirty. All secretion of bile, urine, and even mucus, ceases. Absorption also is completely suspended. The blood now loosing its serum from every pore, becomes more black and thick; all power to generate animal heat seems to be extinct, and the surface of the body is as cold as if the patient were already dead, while within he seems to be on fire, and cries unceasingly, water! The third stage now rapidly supervenes—but at what precise point it begins, cannot well be defined. The dejections and ejections grow less frequent and profuse; but the skin becomes more livid and wrin-

kled; the features more pinched and ghastly—the breath cold; the voice cracked and husky; the pulse imperceptible; the action of the heart, a mere flutter till it ceases to beat altogether, and death closes the scene. Sometimes there is a fourth stage, or sequel to the third, or stage of collapse. The patient may survive this, and a feeble, imperfect kind of reaction takes place, and produce a species of typhus fever, which may run a longer or shorter course, and terminate sometimes in recovery, but oftener in death.

We have already intimated that what is called *vomiting* and *purging* in the second stage, is an erroneous view of the facts. The patient will deny to your queries, that he has either nausea or inclination to stool, and perhaps before the words are really out of his mouth, he will suddenly, without premonition, eject from his stomach and discharge from his bowels a large quantity of serous fluid, as if thrown by a force-pump. This seems to be rather the effect of a general spasmodic action of all the muscles of both the abdomen and viscera. For if you can induce *real nausea*, and a constant retching, these spasmodic discharges are greatly restrained, if not wholly arrested.

Our views of the pathology of Cholera Asphyxia are briefly these:—*First*: An altered condition of the blood, produced by some unknown agent, whereby the crassamentum is rendered too abundant in proportion to the serum, and too highly *carbonized*; and, *Second*; That extreme and general congestion of the portal and mesenteric vessels, and of the capillaries of the stomach and intestines is induced by the same, or some other unknown cause. These two conditions constitute the *essential* elements of Cholera Asphyxia, and are sufficient to account for all the successive symptoms. If these views are correct, what then are the indications of cure? Most assuredly to render the blood *thinner*, and to restore the equilibrium of the circulation, by removing the congestion of the abdominal viscera. What are the appropriate means to effect these objects?

Among those who take this view of the pathology, there can be no difference of opinion about remedies. We are aware that all kinds of treatment have been adopted, recommended, and defended; the narcotic, astringent, stimulant, alterative, cathartic, emetic, and depletory. *We have tried them all*, and seen them tried by others; but we truly and solemnly aver, that we never saw any satisfactory results from any, except the two last mentioned. If we are pointed to the success of the other methods, and to the failures of the latter, our answer is, that the vital powers of some constitutions will triumph sometimes over both disease and the worst treat-

ment, while, on the other hand, there are cases so surrounded by untoward circumstances, as to defy all, and the only appropriate remedies, even when administered most skilfully. How can narcotics decarbonize the blood and relieve congestion? They produce these conditions when they do not exist, and aggravate them when they do. We apprehend the chloroform treatment will be found to have the same effect. With our present views we could hardly be induced to give it a trial. Small repeated anodynes may be useful adjuvants to other remedies by moderating pain and spasms. As to astringents, they may, in the first stage, somewhat restrain the discharges, and do no great injury, and in moderate cases the patient may recover. But how can astringents fulfil the indications already specified? It is plain they cannot relieve or remove the congestion; much less the algid condition of the blood.

Judging from the coldness of the surface, and the feebleness of the pulse we are strongly tempted to resort to stimulants. But no amount of stimulants, internal nor external, can restore the animal heat, while the blood grows thicker, and more and more carbonized. We have seen the surface nearly par-boiled by hot vapor, by means of heated bricks, and stimulants freely administered at the same time, yet not the least degree of warmth imparted to the body. It is evident that stimulants cannot, any more than astringents, fulfill the indications already stated. As to alteratives, there is no time for their action, unless commenced and persevered in during the stage of diarrhoea—for, during the second stage, all absorption is suspended, and for this reason, almost all internal remedies fail.

As to cathartics of all kinds, except calomel, we consider them absolutely injurious and highly dangerous. Salts and oil are among the very worst. The slightest cases of diarrhoea will be immediately converted into the worst forms of cholera, by small portions of either. This effect of cathartics is easily explained by the congested state of the visceral vessels.

But emetics and venesection, differ in their effect from all the other remedies mentioned. Yet so deceitful are appearances, that, if we are guided in our treatment *by symptoms only*, they are wholly contra-indicated. The profuse discharges, pain and spasms, seem to demand narcotics and astringents—the coldness, stimulants and rubefacients—the suspension of bile and other secretions, alteratives, &c., while the vomiting, prostration, faintness, feeble and rapid pulse, seem certainly to forbid the use of emetics and the lancet. Of all diseases “that flesh is heir to,” there is probably none in which appearances are so deceitful; in which symptoms prove to be such a perfect “*Ignis Fatuus*” in treatment.

We have already said, that what has been called *vomiting* and *purging*, are, strictly speaking, no such thing, but a spasmodic action of the muscles of the abdomen, &c., which seem to be induced by some mysterious sympathy between the nervous system and the stomach and bowels, when they have become filled by the serum of the blood being poured into them, or by the congestion of the mesenteric vessels. Now, although emetics do not immediately change the quality of the blood, yet they are, by their mechanical action, a powerful means of relieving congestion of internal organs. They are also the most speedy *alteratives* in certain cases, for restoring or promoting the secretions. By the concussion of the abdominal muscles in vomiting, the large and deep seated blood vessels are compressed, and the circulation driven, as it were, to the surface, by a kind of centrifugal force. In 1832, Dr. Yates, I think, of New York, published a pamphlet, in which he solemnly averred that he treated a great many cases of cholera in that city; that he did not lose a single patient, and that his principal remedy was a solution of tart. antimo., combined with Tinct. opii, given in small repeated doses, till full vomiting was produced. We should prefer the vin. anti., with tinct. opii. Our own experience, however, with emetics, is not extensive, yet we saw two of the most hopeless cases in the very last stage of collapse, speedily relieved by emesis: the one, by giving over doses of aqua ammoniæ, with a view of stimulating the patient, but which produced excessive nausea and retching, under which the pulse returned, the color of the lips was restored, and the patient completely cured; the other, by several table spoonsful of salt, given with the view of vomiting. But, as has been already remarked, the primary, appreciable link in the chain of morbid action, is the deterioration of the blood, and as emetics cannot speedily enough correct this evil, the abstraction of blood seems to fulfil, at once, all indications; and this, in some form, we consider the principal remedy in all stages of the severer cases of Cholera. Some modification of mode, however, is required. We do not say that venesection is necessary in all cases, and that there may not be those where it is contra-indicated. In the first stage it is always safe, and we believe will not fail to cure, ninety-nine times in a hundred, and in many cases, be all that is needed, except caution in diet; the powers of nature will do the rest. But if other remedies are required, they will then operate kindly and efficiently, whereas, without venesection, they would irritate and aggravate, or prove nert.

In the second stage, owing to the loss of serum, the imperfect respiration and decarbonization of the blood, and its consequently thick and tar

like condition, and therefore, the *asphyxied* state of the brain and nervous system, bleeding will be more difficult, and must be performed with more care. The blood will run slowly at first—it is best it should—but persevere till it flows freely, and till its color and consistency becomes redder and thinner. If it can not be drawn from the arm, open the temporal artery, or apply leeches or cups to the epigastrium. In the stage of collapse the indications are the same, and we must still endeavor to abstract blood. Stimulating emetics may aid us, by giving a temporary impetus to the circulation, till enough blood has flown to relieve the laboring lungs; the struggling heat and paralyzed brain. When this is accomplished, the generation of animal heat begins, the secretions and all other functions are restored. Of the *modus operandi* of venescence, it is unnecessary to speak. It must be obvious to every intelligent Physician. For it is a well established fact that the abstraction of blood rapidly diminishes the proportion of crassamentum, and, if carried to excess, produces a dropsical condition, a state of things incompatible with Cholera. It was observed in 1832, that nursing and feeble women seldom had Cholera. We can *imagine* that lactation and menstruation, or menorrhagia, would so reduce the blood as to counteract the epidemic influence.

It would be easy to quote high authority for the practice of bleeding, but our article has grown much larger than we intended, and we will content ourselves therefore by referring to the report of Dr. Walker to the Gov. of Massachusetts, published in a late No. of the Boston Medical and Surgical Journal. Dr. W. had charge of the Massachusetts State's Prison, when the Cholera suddenly broke out, and 115 convicts sickened in 24 hours; 196 had the disease, and one of the whole number died. We have never seen so concise, and lucid a detail of treatment as given in this report. The treatment itself we consider a perfect model. For promptness, and *strait forwardness*, we think it, worthy of all praise. We must quote one paragraph. He says; "When practised at the commencement of the disease, bleeding was followed by *immediate relief*. So much so, that men with *skin and tongue cold and pulse absent, or scarcely perceptible*, were entirely relieved by the loss of from sixteen to thirty two ounces of blood; the pain was alleviated, vomiting and diarrhoea removed, and the disease, as it were, *extinguished*."

With regard to external applications our experience is against them all, whether sinapisms, cataplasms, rubefacients, hot baths, fomentations, *et omne id genus*. They are exceedingly disagreeable to the patient, increase his

restlessness, fatigued, and debilitated him, without affording any adequate compensation. Friction with dry flannel is all that we permit.

Besides the emetics combined with laudanum, we use, as an anodyne, alterative, and stimulant, after bleeding, a combination of opium, camphor, capsicum and calomel, varied in proportion and quantity according as circumstances seem to demand; say opium gr. $\frac{1}{2}$ to 1, camph. gr. 1, cap. gr. 1 to 5, and calomel gr. 2 to 5; repeated every half hour, hour, two hours, &c. Instead of cold drinks, give small pieces of ice, which are more grateful to the patient than anything else.

We must now be permitted to indulge a little in speculation; for hitherto we have endeavored to keep as close to facts as possible. Cholera Asphyxia has again invaded our country, and many believe that it has been *imported*. We believe no such thing. During the last summer, dysentery prevailed throughout the northern states. That dysentery was accompanied in many instances by unusual serous discharges—and many cases terminated fatally, not so much from the usual bloody mucous discharges, as by serous ones. We remarked to others more than once, that patients with these evacuations had very much the general appearance as those with Cholera. The dysentery, too, like Cholera, was greatly aggravated by cathartics, and those physicians who did not make this discovery, have a fearful accountability to answer for. We know, too, that this disease, like Cholera, was *always* cured by full bleeding in the early stage of it. In short we believe that a *choleric* influence has existed in this region of country for a year. Again, although dysentery disappeared about the first of October, and the months of November and December, now past, were remarkably healthy, yet there have occurred, and are now occurring every week, cases of diarrhoea, and even of cholera morbus in our city and county. Six cases of severe vomiting and purging have come to my knowledge within two weeks. I therefore apprehend that we are already in the forming stage of the Epidemic influence. What that influence is we may never know. Among the known agents, telluric electricity seems to be the most probable. It may however be some agent not yet known to human science.

On the subject of prophylactics, we would make a suggestion, for consideration and observation. While we know not the primary cause of Cholera, we cannot hope to destroy that cause; we can only aim to counteract its deleterious influence on the system. If our view of the pathology of this disease be the true one, then it follows, that, besides "temperance in all things," a system of dieting that will reduce the crassamentum of the blood is the proper one. Now this we can do by a liberal use of acetic

acid. The most agreeable and convenient articles are vinegar as a condiment, and cider as a beverage. We came to this conclusion by a process rather "a priori," and, therefore, only offer it as a speculation. The only fact we have on which to base this opinion, is the well known effect of vinegar, if used to excess, in producing a pale skin and general debility. And why may not acetic acid be as useful in Cholera, as the tartaric and citric in preventing and curing scurvy? We offer the suggestion only for what it is worth.

ROCHESTER, N. Y., Jan. 5, 1849.

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Report on the Origin and Progress of the Cholera at Quarantine, Staten Island, N. Y. By ALEXANDER B. WHITING, M. D., Health Officer.

QUARANTINE, STATEN ISLAND, }
December 11, 1848. }

TIMOTHY R. HIBBARD,

Chairman Sanatory Committee of Board of Health.

SIR:—In compliance with a resolution of the Committee, I submit an outline of the origin, progress, and character of the cholera as it has prevailed at Quarantine recently. * * * * *

On the second of December, the packet ship New York arrived at Quarantine with a number of persons sick, having lost seven during the last week of her voyage, with a disease that has since proved to be Asiatic Cholera. The New York left Havre on the ninth of November, with three hundred and thirty-one steerage passengers, twenty-one cabin, and thirty-three crew; a total of three hundred and eighty-five. All continued well until the twenty-fifth, Saturday, when one of the steerage passengers, a German, aged twenty-nine, in robust health, was attacked with vomiting and purging, accompanied by cramps of the muscles of the upper and lower extremities. The Captain supposed it to be cholera morbus, and prescribed judiciously for the symptoms, but they continued until the third day, when death occurred.

The next case was on the 26th, Sunday, when an old man aged sixty-two, in feeble health, was attacked with vomiting and purging, with coldness of the whole body, and violent cramps and spasms. He died on the second day after the attack. Monday and Tuesday, 27th and 28th, two cases occurred. A girl aged five years, died in two hours, and a boy also, aged five, died in four and a half hours after their first attack, both perfectly well previously. Wednesday, 28, a man aged forty, was attacked at 8 o'clock, A. M., and died at 3 P. M., of the same day. On Thursday two children sickened and died, after six and eight hours' illness.

The ship came to anchor at Quarantine on Friday night, and from that time until Sunday noon, when the passengers were landed, twelve new cases occurred.

The best means of arresting the spread of the disease appeared to me to be to remove them from the confinement of the ship, and to separate the sick from the well. A steamboat was engaged to bring them to the Public Store Docks. The sick were sent to an excellent hospital room, and good nursing and medical attendance immediately provided.

The well have been suitably provided for, and strict attention to diet and cleanliness enforced; their clothing has been thoroughly aired daily, and the whole enclosure subjected to the disinfecting influences of Mr. Grant's valuable Disinfectant. I trust that these means may serve to modify, and soon entirely subdue the disease that appeared to be increasing its malignancy and victims on ship-board.

Since the arrival of the ship at Quarantine, eighteen cases have occurred, making, with the twelve taken from the ship, thirty cases, of which number twenty have died. The whole number from the first case at sea, has been thirty-seven, of which twenty-seven have proved fatal.

The disease was considered by Captain Lines as cholera morbus, and treated by him as such, with calomel and ipecacuanha opiates, warm drinks and mustard, and heat externally. Vomiting and purging, cold clammy skin, cramps and spasms were observed by him in several of the cases, but not the peculiar character of the evacuations.

In the cases that have occurred here, diarrhoea has preceded in only a few, or about one-third. A majority were attacked in the morning, between the hours of two and eight.

Most of them have presented all or most of the following symptoms:—Vomiting and purging of thin discharges, sometimes at first, light brown, but generally from the first, of a white or yellowish white or pearl color, with white flocculi, forming a thicker whitish sediment on standing a short time. They are well described as *rice water* evacuations. In some cases a half gallon has been vomited, but generally in smaller quantities. A child six years old vomited fully this quantity at once, had no other evacuations, and afterwards recovered.

The vomiting is usually accompanied by great uneasiness and pain, particularly at the epigastrium. In some cases vomiting has existed without purging, and vice versa. In several cases neither vomiting nor purging, but the stomach and bowels were found filled after death with the same fluid. One or more large worms, the *Lumbrici*, have been discharged, either by vomiting or the bowels, in a large majority of cases. This fact has been before remarked.

The tongue and breath are icy cold; sometimes the tongue is clean, but generally slightly coated. The voice becomes weak and husky, and with a great effort the patient speaks in a thick whisper.

The skin assumes a dark livid color, becomes cold and clammy, and when pinched up, remains so for a short time.

The countenance wears a haggard, sunken look, the eye is dull and heavy, although the pupil is somewhat dilated.

The extremities are shrivelled, the fingers and toes, and the nails resembling those that have been long in the water, and of a purple hue.

All the cases have been affected with cramps and spasms of the extremities and abdomen, in some slight, but generally a very painful symptom.

The pulse, from the inception of the real attack, becomes small and frequent, from 110 to 140, according to the progress of the disease, and in the stage of collapse, entirely lost at the wrist for hours.

The breathing labored and hurried, and in the cases where the spasms were severe, occasionally suspended momentarily.

In some of the cases all these symptoms were present, while in others only a few of them existed. The number or *apparent* violence of the symptoms form no criterion for the prognosis. Fatal results followed in a number of cases in a few hours, where the dejections were slight, and spasms and other violent symptoms were absent. Death seems to ensue from the oppression of the vital organs, and the nervous system, by some giant poison. The wretched expression of countenance, the icy tongue and breath, the sunken eye, reveal this most strongly.

In this disease there has been but one stage—that of collapse—although every pains have been taken to detect the first deviations from health, directions given to all to communicate them at once, and persons employed to inspect them constantly, and a physician to pass among them at all hours of the night and day. The first intimations are the extreme symptoms, defying the most prompt and decided remedies.

The appearances after death are those that have been usually observed after death from cholera. A shrunk and shrivelled livid exterior, a gorged and congested condition of the internal organs. The meninges and substance of the brain, and all its vessels, unusually red, either from actual congestion, or the retention of the *cruor* of the blood while the serum is drained off. The lungs, liver, spleen, heart, intestines and kidneys, present the same deepened color. I have observed no alterations of structure or softening.

The bladder is contracted to an extremely small size. I should have observed that there is an entire suppression of urine in most of the cases.

In several cases that I have examined, the entire mucous lining of the bronchial tubes has been much injected.

That this is Asiatic Cholera, cannot be doubted. From the commencement of the disease to the present time, thirty-seven cases have occurred, twenty-seven of which have died in an average period of ten hours. The average duration of the disease in the children that have died, has been four hours.

A new feature has appeared in the history of this disease, in the fact that six persons have been affected in a similar way, who had been but for two days exposed to contact or proximity to these people.

Nothing like cholera existed at this place at the time of the arrival of the ship *New York*. When her passengers were removed to the public stores, they were occupied by about seventy persons, who had just recovered from other diseases. One of these, a man just recovering from a fractured patella, assisted in the removal of the patients. This was on Sunday; on the Wednesday following, he was attacked with violent symptoms of cholera, and died the same day. A woman who had been a nurse, without having any communication with these people, but occupying another room in the same building, was attacked, and died the same day, with all the symptoms of cholera. A man who had been discharged and

gone to the City of New York on Monday, and had remained a *little over a day* in this same enclosure, was returned from the City as a case of cholera, and died also on Wednesday. On perceiving this communication of the disease to the convalescents, I immediately sent them away and distributed them through the other hospitals, since which, three others have been attacked, two of whom have died, but none other than those at first exposed at the public stores, have been affected. These had all been inmates of the hospital for weeks, were ready to be discharged, and had but a limited exposure for forty-eight hours to the influences of the disease.

At the time the first cases occurred, November 25th, the ship was in N. lat. 42°, long. 61°, about 140 miles S. S. W. from Sable Island. On the 23d and 24th, the two days preceding the appearance of the cholera, the wind was N. N. W. On the 25th it changed to the southward, with squalls and rain. In the morning the barometer was at 30 inches, and fell during the day to 29½ inches; thermometer 60° Fahrenheit. Sunday and Monday, 26th and 27th, wind westerly, and fresh, Tuesday, 28th, moderate from N. W.; barometer 30, thermometer 42°.

I have given these particulars of the wind and weather in connection with the dates of the first appearance of the disease, that all aid may be given to our attempts to account for its origin. Here its actual manifestations commenced. Did it originate in a casual but unusual mingling of certain elements or condition of the elements, or from contact with an advanced wing of the grand cholera army, or from the development of seeds latent and waiting for peculiar culture? Here we are met by interesting and peculiar facts.

All the persons who have been attacked from the first case on board ship to the last, excepting the inmates of the hospital, have been from among two hundred and seventy Germans who have been living in Havre and its environs, where there has not been a single case of cholera. These persons were originally from Germany, mechanics, and flourishing, until by the triumph of liberty and equality, the native French artisans have succeeded in inducing the public to withdraw their patronage, and the municipal authorities to proscribe them.

The consuls of their native countries have come forward and provided for their emigration to America. The question arises, is there not some difference between these and the other passengers that must enable us to account for the fact.

The only one that may be adduced, is the depressing influence of grief at being driven from their homes and flourishing trades; but this is not apparent in their appearance or manner. They enjoyed promiscuously, with the other passengers, the best accommodations, and I am assured by Capt. Lines, that their fare was the same with the other passengers.

I have examined their provisions on board ship, casks of bacon, rice, flour, beans, biscuit and potatoes, unheaded and exhibited to me, as it has been dealt to them, and I am sure that more wholesome or sweeter provisions could not be provided.

They are all healthy and robust—have not been exposed to the cholera at home, and have since leaving their port of departure, shared, equally with the exempt, the comforts and privations of a sea voyage, variations of wind and weather, have breathed the same air, and fed on the same food.

When I speak of *treatment*, and mention twenty deaths out of thirty cases, I can evidently not be expected to produce a successful plan of treatment.

I will mention the general plan however, as in some cases it has been successful, and in others failed from the fact that the disease presented its first and final stage simultaneously. On admission, the patient is enveloped in warm blankets, next the skin, and warm mustard applied largely to the stomach and bowels and extremities. Hot bricks, bottles of water, or bags of sand applied to various parts of the body, and a stream of hot air conveyed from a hot-air apparatus under the bed clothes. With this is combined as much friction with hot tincture of capsicum as can be carried on under the bed clothes without exposure of the body to the air. This is done in all cases, and is an efficient mode of restoring warmth to the surface, if practicable.

Various internal means of treatment have been tried. In a number of cases, Dr. Joseph Brown's practice of administering mustard emetics, has been adopted, but without the blood letting. Only two cases that were treated in the first stage of the disease in this way, were benefitted, reaction occurring after the emetic, followed immediately by a scruple dose of calomel, combined with Dover's powder. Unless reaction is effected by the emetic, the prostration and irritation of stomach produced by it can only serve to enhance the disease.

In eight other cases, the large doses of calomel capsicum and camphor, as administered in the practice of Dr. Cartwright, of Louisiana, and suggested to me by S. M. Fox, Esq., were carefully tried, combined with the rubbing in of hot tincture of capsicum. But the results did not encourage the continuation of the treatment.

Chloroform has been administered in a number of cases, carefully and repeatedly, and at first gave some hope that it would prove a successful remedy, but no other permanent good has resulted from its use but to relieve the spasms and cramps. For this purpose I have used it in all cases moderately, and if not a cure for all the symptoms, it is an invaluable remedy in subduing one of the most painful symptoms of the disease.

Hot wine whey, and mustard whey have been administered, in combination with other means, particularly in the latter stages of extreme prostration.

The *saline mixture* has also received a careful trial in a number of cases from the commencement of the disease, and although hopefully watched for beneficial results, laid aside as worse than inefficient. If administered in a condition of the system when it might be absorbed, advantage may be derived from it, otherwise it can but increase the irritability of the stomach, the thirst and prostration, and aggravate the disease.

Sugar of lead and opium have been administered in large and small doses, but soon abandoned as impotent.

The treatment that has proved of most service has been calomel in scruple doses, combined with opium and camphor, followed at two or three hours intervals, by smaller doses of calomel, until reaction is indicated by some action of the liver. This plan, combined with the faithful application of external heat, &c., I am satisfied has proved of most advantage in the cases that have come under my notice. Every case in which the slightest bilious evacuation has been procured, has commenced to recover from that

moment, and although of itself, unable to effect the reaction necessary for its own peculiar action, calomel will doubtless always prove the most potent auxiliary in the catalogue of remedies for cholera.

No one specific can ever control a disease whose nature is made up of so many complications, an obstinate exsanguination and paralysis of the surface, with a fearful congestion of all the internal vital organs, and a derangement of the nervous system, indicated by convulsions of every portion of the body.

December 18th. Since the above was submitted, I have had further opportunity to observe the character and treatment of the cholera, existing at the Marine Hospital. Since the 11th December to date, there have occurred thirty-three new cases. All but three of these have been from the same class of Germans from Havre, as the other cases. One, and the only one that has occurred among the French passengers of the New York, was a Frenchman from Paris, a fatal case.

Two others were old inmates of the hospital, of Irish Nativity. They were just recovering from typhus fever, and located in a hospital most distant from the cholera hospital. One was attacked on the 10th, the other on the 11th of December, with all the symptoms of the disease, proving fatal on the third day in the first case. The other is convalescing. No intercourse between these patients and the cholera cases can be detected, neither of the convalescents that were at first returned from the public stores, and were afterwards attacked, had visited their wards, and their physicians in attendance had been but little among the cholera patients.

The whole number of cases, thus far, at Quarantine, has been sixty-three. Of these twenty-nine have died. A large proportion have been children under fourteen years, twenty, or about one third of the whole number having been of this class.

Most of them passed through the first attack of the disease, and died from subsequent congestion or effusion in the brain.

Of the thirty-three cases that have happened since my report of the 11th, I am glad to state that only nine have been fatal. And as there appears to be no difference in the severity of the symptoms at the outset of the disease, I cannot but attribute the diminished fatality to a more happy plan of treatment.

From the results of the first thirty cases, and post mortem revelations, I became convinced that the stimulating plan was not the treatment for *this* cholera, and abandoned at first the mustard, then the capsicum, ammonia, brandy, wine whey, etc., and relied on calomel in large doses, with opium, Dover's powder, and camphor.

With regard to camphor, even though it has been always lauded, and by some as *the specific* in cholera, I entertain suspicions of its utility.

The treatment I have now adopted and adhere to, from its decided agency in controlling the symptoms and inducing early reaction, is the exhibition of moderate doses of calomel, with morphine, at short intervals. Five grains of calomel, with a quarter of a grain of sulph morphia, is at first given to an adult; in a half of an hour, or one hour, a scruple dose of calomel is exhibited, and is usually retained; afterward, a pill of Cal. gra V, Sulph Morphine gr 1-4, is given each hour, two hours or three hours, as the effect may indicate. This is observed in the subsidence of the pain and

spasms, the diminished quantity and frequency of the evacuations, the return of warmth, and the restoration of the pulse.

This treatment is continued until some indications of bilious action appear; the first is usually a change of color and consistence from the light, thin, rice water, to a greenish, and then brown or brownish yellow color. The evacuations from the stomach and bowels will frequently continue green, or of the color of sulphate of copper, for hours, but I have not known a single case to relapse where this effect had once been produced.

I was led to substitute the morphine for opium, from its being less liable to disturb the stomach or to produce narcosis, an effect to be deprecated in this stage of congestion, except it result naturally from the obviation of pain and excitement.

In children, however, under six or seven years, I have used Dover's powder in preference to morphine, as being more manageable in regard to the dose. A very simple remedy, but one that I have used in children with happy effects, has been the tea of the spearmint, given hot in the first stages, and afterwards cold, in a small quantity, a large spoonful occasionally.

The most valuable external means is the stream of hot vapor of alcohol, poured over the patient by a very simple apparatus at the foot of the bed. This is a large alcohol lamp placed under a sheet iron cylinder, with a pipe running from it. The lamp is placed on the floor, and the tube with an elbow, and terminating in a large funnel to elevate the clothes, is inserted under the bed clothes.

This and hot mustard applications are the only external means that I rely on. They are potent, and can be continued without the fatigue or exposure of the patient, a paramount desideratum, as there is plenty of both to contend with as the inevitable effects of the disease.

I should do injustice, did I not mention the faithful attention of the physicians of my staff, particularly Dr. F. L. Harris, Deputy Health Officer, and Dr. John Gallaer, who has devoted his whole time and care faithfully to these patients, through all hours of the night as well as the day.

Dr. William H. Stokes, of the Mount Hope Institution, near Baltimore, Md., and the American Journal of Insanity.

We cheerfully give insertion to the following article contained in the last number of the American Journal of Insanity, occasioned by a letter from Dr. Stokes, which was transmitted to us as well as to the Editor of that Journal, and which appeared in the number of this Journal for December, 1848.

ED. BUFFALO MED. JOURNAL.

In the April number of the Journal of Insanity, 1848, the Editor gave a brief account of several Institutions for the insane that he visited during an excursion to the South. He thus mentions his visit to the Mount Hope Institution.

"The Mount Hope Hospital is but a short distance from Baltimore; it belongs to the "Sisters of Charity," and is wholly under their management. Dr. Stokes, of Baltimore, visits it daily. He was at the hospital

when we called, and with one of the Sisters accompanied us through the entire establishment, which we found very neat and in good order. The number of insane was about sixty, three-fourths of whom were women. This hospital also receives cases of *mania a potu*. The institution is defective in many respects, especially as to proper means of heating and ventilation; in facilities for affording labor to patients, and we should also say in *Medical Supervision*. Dr. Stokes is well qualified, we believe, for the care of the insane, but he is, we understand, only hired to visit the institution daily and prescribe for such patients as the Sisters request. In his late Report he dwells at considerable length on the great importance of medical treatment in insanity, and apprehends Medical Officers of insane institutions have neglected too much the resources of medicine. This may be correct, but if so, how important it is that a household of insane persons should be under the supervision of a Resident Physician, who can vary the treatment according to circumstances. Every one experienced in the care of the insane well knows, that at no other time of the twenty-four hours, are the services of a physician more essential in a Lunatic Asylum than in the evening. Besides it must be difficult to establish a uniform and good *system* of moral treatment, unless the selection, instruction and discharge of the attendants on patients, are entirely in the hands of the Medical Officer.

As we have said, the Hospital as to neatness, was in excellent order, and we could not but admire that self-sacrificing spirit of the pious and benevolent females who have charge of it. They are we believe most faithful and excellent nurses."

It must be evident to every unprejudiced mind, that the foregoing remarks were dictated by kind and respectful feelings towards Dr. Stokes, and the proprietors of the Institution. But to our surprise Dr. Stokes thinks differently; and in October last sent us the following letter, which we cheerfully publish, and as early as possible.

[The letter follows which is the same communicated for this Journal, Dec., 1848, and is accordingly omitted.]

EDITOR BUFF. JOUR.

STATE LUNATIC ASYLUM, UTICA, Dec, 4, 1848.

To Dr. Stokes:—

DEAR SIR:—Your letter was not received until the last number of the *Journal* was published, but I hasten to give it as early an insertion as is practicable.

I am much surprised that you complain of what I said respecting the Mount Hope Institution. The defects to which I but briefly alluded, respecting the warming and ventilation, were so obvious, and are so strongly condemned by conductors of similar establishments, and by all good authority on such subjects, that I did not suppose that I was saying anything but what would be in accordance with your own views, and serve to strengthen your exertions for improvement. Part of an Institution in New England, of which I had charge for several years, and a small portion of this Asylum were formerly warmed, as your old wing and Lodge now are, by *close stoves*; and I know by experience, that where they are used, the air cannot be kept pure. I always considered them objectionable, and felt obliged to any one for condemning them, and thus aiding me in effecting

their removal. The close stoves in your old wing and in your Lodge, where your most filthy and most deranged class of patients are kept, serve but to heat the impure and fetid air of their apartments, instead of furnishing to them, as they should have, a regular supply of fresh air, moderately heated. Even your hot-air furnaces in your new wing and centre, heated by coal, though far better than your stoves, are objectionable in such establishments, and are so considered by all good authority, and have been abandoned in England and are disappearing in this country. Of this you do not seem to be aware. Thus you say our "arrangements for ventilation and warmth are unsurpassed by any similar establishment in this country or in Europe." Now Dr. Bell of the McLean Asylum, who recently visited England for the express purpose of ascertaining the modern improvements in institutions for the insane, says in his published report:—"The hot-air furnace is *universally abandoned in Great Britain, in this class of Institutions*. Under none of its thousand modifications did it meet *certain great and obvious objections* which rendered its employment inexpedient, where an atmosphere of a high hygienic quality is as essential as it is in an Insane Asylum."

We could have truly stated what we did of places of ventilation and warming which are far less objectionable than yours, and have no hesitation in saying, that *any Institution for the Insane, that has not some means for effecting a forced ventilation, and arrangements calculated to insure an abundant and regular supply of fresh air, heated by a method that will certainly prevent its ever being more than moderately warmed, is seriously defective.*

As regards *labor*, I also but expressed the opinion of all good authority. But you give us to understand, that your 'patients have at no period of their lives been accustomed to labor.' I judged differently from their appearance, but may have been mistaken; yet your own report informs us that you have a large number of of 'laborers,' 'farmers,' 'brick-layers,' 'servant-maids,' &c.

As respects *medical supervision*, I was also in accordance with all good authority, and with the practice of every other Institution for the insane, in this country. And do you intend to have the public understand that an Institution filled with a large number of insane persons, and patients suffering from other diseases, such as Mania a potu, Consumption, Typhus and Bilious Fevers, &c., all of which are received at the Mount Hope Institution, are just as well provided for, by having a physician who resides several miles distant and engaged in other business, hired to visit it twice a day; as it would be to have him reside in the Institution, and devote to it all his time? Surely, you will not so insult the common sense of mankind, and condemn the general practice of this and other countries. The necessity for a Resident Medical Officer for such Institutions, is everywhere acknowledged. The distinguished 'Commissioners of Lunacy' in England, in remarking upon the Norfolk Asylum, say;—"The most serious defect in this Institution, and one which may be attended with the most mischievous, if not fatal consequences, is the want of a Resident Medical Officer."

On this subject of medical supervision, you accuse me with 'asserting in regard to yourself what is perfectly destitute of foundation;' but I do not find that you adduce the least evidence of so rude and serious a charge. I said, 'We understand Dr. Stokes is only hired to visit the Institution daily,

and prescribe for such patients as the Sisters request.' We certainly did so understand at the time of our visit; and is it not strictly true? Mount Hope Institution is a private establishment,—you are not its owner or manager, and have no authority there but what you derive from the Sisters who hire you, consequently, what I said must be correct.

You admit that you have not the selection and control of the attendants on patients, but say, 'the sisters constitute the corps of attendants.' Are they the attendants upon the male patients?

You seem to rely much upon the circumstance that you report but few deaths. You must certainly know there can be no just comparison of a private Institution that receives only such patients as its proprietors choose, and can discharge them when they please—with those that are obliged to receive all sent to them, and even to give the preference to the worst cases, and obliged to keep such until they die.

An Institution may be very badly managed, and yet report but few deaths; as those not likely to live are removed before death. To what extent this is the practice at Mount Hope Institution we know not; but receiving as it does, most of its patients from the immediate vicinity, and those belonging to the wealthy or non-laboring class as you intimate, it would seem very probable, and *we think very proper*, that previous to death, they are, as your report phrases it, 'removed by friends.' That something of this is done, is evident from your Reports. Thus, certain cases of consumption, organic diseases of the heart,—diseases sure to prove fatal, we see were removed 'unimproved,' and in a few days after admission. Thus, a case of consumption received the third of June was discharged on the tenth, 'in the last stage of phthisis,'—a case of organic disease of the heart, in twelve days after admission 'unimproved,'—and a case of typhus fever discharged the next day 'unimproved,' though a case received the same day was retained and recovered. Besides, I notice some mistakes. Thus, in your table of deaths, only five are given, but in your Register seven may be found. I also see a considerable number of cases denominated insanity, that we believe would not be so called elsewhere. Thus, what you call Hysterical Mania, and Mania of only one or two weeks continuance, are not, correctly speaking, we apprehend, cases of insanity.

I do not see that there is anything else in your letter requiring notice from me. It is evident that we do not agree as to what constitutes a good system of warming and ventilation: but I am confident that we shall not disagree if you will read Bell, Wyman, Reid, and other late authorities on these subjects; or if you will visit some of the new Institutions for the insane at the North, where improved methods to a greater or less extent have been adopted. But if you still think all these authorities are wrong, and that the universal practice of having a resident physician in such Institutions is unnecessary, I will most cheerfully insert your facts and reasonings on these subjects in this Journal if you will send them to me:—but I beg you to recollect, that something besides *assertions* are wanted,—that your *ipse dixit*, or mine, unsupported by facts, or in contradiction to the scientific and well established improvements of the age, are worth but little.

Having thus, I am confident, most clearly shown that you have not the least ground for complaining of what I said, I might very properly close;—but your letter asserting that "Mount Hope Institution is wanting in

nothing that can contribute to the recovery or promote the comfort of its patients," an assertion, that, in our opinion, cannot be truly said of any other Institution in this or any other country; has induced me to look rather carefully into your published Reports, and I am so convinced, that the welfare of that Institution and those who patronise it, and the usefulness of other Institutions that are now or may be hereafter established in this country for the insane, may be promoted by a few additional suggestions, that I feel it my duty to make them. And I do so, I beg you to believe, with none other than the most friendly feelings towards yourself and the Institution with which you are connected, and solely from a desire of promoting the welfare of that unfortunate class of our fellow beings to whom much of my life has been devoted.

For the remarks which follow, the reader is referred to the Am. Journal of Insanity.

ED. BUFF. JOUR.

Report of a Case of Inflammation of the Fauces and Glottis, resulting in Complete Obstruction of Respiration; Tracheotomy successfully performed. By J. B. HERRICK, M. D., Demonstrator of Anatomy in Rush Medical College.

I was called, at 2 o'clock, A. M., of Aug. 8, 1847, to visit Frederick P., æt. four years. The father of the patient—who called me—seemed much alarmed; and, upon entering his house, I found his fears well grounded. The respiration of the child, which was so difficult and labored as not to permit him to assume any but the erect position, could be heard distinctly in distant apartments of the dwelling, and seemed to threaten immediate suffocation.

From the parents, I learned the following history of the case:—About three weeks previously, they had noticed that the child manifested a sensation of pain when he swallowed portions of solid food; subsequently, a swelling appeared about the angles and base of the lower jaw, and still more recently, difficulty of breathing had been superadded, which latter symptom had existed ten days, and had been slowly but constantly increasing in severity, especially during each night. The excuse given by the parents for not calling aid sooner was, that "they had suspected the malady to be mumps, and thought their child would recover without medical aid." I found the patient in a high state of febrile excitement, with a swelling of the glands, similar in appearance externally to what would occur, in a well marked case of *cynanche parotidæ*. Upon examining the mouth, I found the parts from and including the anterior palatine pillars and uvula, and extending as far back as I could discern, highly inflamed and much swollen: the uvula and anterior pillars so much so as to make the opening to the fauces quite small. I at once supposed the difficulty to be an abscess, or the lodgement of some foreign body, at the root of the tongue, and accordingly introduced my finger to detect it. I could, however, find nothing, and so far as the exploration could be carried, the swelling seemed to be general and uniform; even the tonsils did not assume more than a proportionate amount of the enlargement, to lead one to suspect them of having been the primary seat of the affection.

The epiglottis and rima glottidis—although the examination added so much to the difficulty of breathing, as of necessity to be made hastily and imperfectly—were found involved in such a state of inflammation and enlargement, as, together with physical signs, to leave no further doubt of the cause of the present urgent symptoms.

I commenced my course of treatment by scarifying the engorged parts; took a liberal quantity of blood from the temporal artery; gave an emetic of tart. ant., which had a good effect, and applied fomentations over the seat of the inflammation. A slight amelioration resulted from these remedies. I returned home, after prescribing fomentations, and a solution of tart. ant., to be given in sufficient quantity to produce slight nausea.

Returning again, after a few hours, I found my patient so much worse, that I thought proper to inform the parents that tracheotomy offered the only possible chance for relief. I explained to them the nature of the operation, and the uncertainty of its success. The case had now become so evidently critical that they readily gave their consent, and even urged me to hasten its performance, when they saw their child convulsed and in the agonies of approaching death from suffocation. The operation was gone through with in the ordinary manner without any untoward occurrence, save the escape of a small quantity of venous blood into the trachea, which was expelled by a few efforts at coughing as soon as the canula was inserted. The relief was immediate and most gratifying. The convulsions ceased as soon as air was freely admitted to the lungs, and in a few minutes, the patient fell into a quiet slumber. He was suffered to remain for several hours without being disturbed by the use of any other remedies.

I then directed a powder every third hour, composed of two grains of calomel, and one of ipecac., until three were given; to be followed by a dose of castor oil, three hours after the last powder. During the forenoon of the next day, he had several copious dark bilious evacuations, and the febrile symptoms gradually subsided, so that on the day following, the little fellow was so much better that he began to realize his situation, and was so chagrined with his new breathing apparatus, and at the loss of his voice, that he became very petulant, and could not be controlled by his parents, but had, during the remaining time he was under treatment, the liberty of the house and yard nearly as he pleased.

The subsequent treatment consisted in the use of a low diet; counter irritation, by the use of ung. ant. over the affected parts, and the daily application of a solution of arg. nit.—8 grains to the ounce—to the inflamed surface,

The swelling externally gradually subsided, and, at the expiration of eight days, appeared considerably less about the uvula and pillars of the palate; but still I found by closing the orifice of the canula, that air could not pass the superior opening of the larynx, and the removal of it would have resulted in instant suffocation. I now substituted the tinct. of iodine for the solution of nitrate of silver as an application to the inflamed surface, and continued the counter irritation as before.

After using this for ten days, without any perceptible improvement in the capacity of the larynx for the performance of its functions, the use of all local applications was discontinued. I now excised a small portion of each tonsil, which was accomplished with some difficulty, owing to the fact that they appeared but slightly enlarged, not sufficiently to obstruct respi-

ration in the least. By this means, however, a small quantity of blood was abstracted from near the seat of the disease, and was doubtless beneficial.

I then directed 3 grains of iodide of potassium every third hour till 12 grains were given. This prescription was repeated for six days in succession. The third day after I commenced its use, I was gratified to find, by the return of the voice, when the orifice of the canula was closed, that the case was improving; and, at the end of eight days—twenty-six days after the operation—I removed the tube, and closed the artificial opening to the trachea with a strip of adhesive plaster. The wound healed rapidly, leaving but a slight scar; and since that time, the child has enjoyed good health, and the larynx and trachea have performed their functions perfectly.—*North Western Medical and Surgical Journal.*

Observations on Collodion in the Treatment of Diseases of the Skin. By ERASMUS WILSON, Esq., F. R. S.

It is now about four months since a solution of gun-cotton in sulphuric ether (collodion) was placed in my hands by Messrs. Bell, of Oxford street, and since I first proceeded to employ it in the treatment of cutaneous diseases. I was at that time much interested in the medical progress of a young lady (the daughter of a physician in the west of England) who had been suffering for many years with scrofulous ulceration of the skin in various parts of the body. She had been under my care for several months, and the sores were much improved, but they were nevertheless very far from being healed. The diseased skin had the appearance of being worm-eaten, its hollows were filled with pus, which burrowed beneath the surface, and it was moreover thickened and congested. By the constitutional treatment which I had pursued, I had to a considerable degree corrected the pyrogenic tendency of her system; but I felt the want of a local remedy that would serve as an impermeable covering to the surface—in fact, take the place of the lost epidermis, and act the part of an artificial scarf-skin. I had tried vulcanized caoutchouc spread with adhesive plaster, gutta percha, nitrate of silver, astringent solutions, ointments, and pressure by bandage, in vain—the remedy was not as yet found. I was revolving this in my mind when the collodion was put into my hand. The bearer of the little bottle may remember my exclamation, that “that was exactly the thing I wanted.”

On the next visit of my patient, I removed the dressings from the sores, and pencilled them over with the new agent, which covered the surface with a powerfully adhesive film, of about the thickness of gold-beater's skin, and effectually represented the lost scarf-skin. A piece of dry, soft linen was the only additional covering required, and she left me, much delighted at the abandonment of the local applications and bandages. This young lady has since continued to apply the collodion herself, night and morning, until the present time, when the sores are nearly well, and the congestion and scrofulous thickening of the skin almost gone.

From careful observation of the effects of the collodion in this case, I found it to possess four important properties, namely:—

First. That of a mild stimulant.

Second. That of an efficient substitute for the natural scarf-skin.

Third. That of a mechanical compress.

Fourth. That of an adhesive glue, from which quality it derives its name.

First. As a mild stimulant, it is fitted to exert a local alterative action on the congested capillaries of a chronic ulceration, and give activity to the healing process.

Second. In its character of a substitute for the absent scarf-skin, it is transparent, pliant, and more or less impermeable, according to the thickness of the layer that may seem to be required.

Third. Its most remarkable property, as it seems to me, is the contraction which occurs during the desiccation of the collodion, and which produces a local pressure of considerable power on the surface to which it is applied. Thus, in the case above related, the congestion of the thickened skin was relieved by the varnish-like film of collodion spread upon its surface, by means of a camel-hair brush, as completely as if a nicely-adjusted bandage had been placed over it. In another instance, I found a film of collodion entirely remove a purple congestion (resulting from imperfect circulation) from the tip of the nose, in a lady who had long suffered from the annoyance. In a third case, in which the fingers of an elderly lady were congested and blue, and the congestion was attended by pain and throbbing, like that which accompanies chilblains, the collodion produced so much contraction as to render their tips white and bloodless, and I was obliged to discontinue the application in consequence.

Fourth. The glue-like property of the collodion is evinced in its adhesion of cut surfaces, a property which is much increased by the contraction above mentioned. When employed with the purpose of keeping together the edges of an incision, a piece of cambric or thin linen rag should be dipped in the solution, and placed along the line of incision, after the cut edges have been adjusted and carefully dried, perfect dryness of skin being a necessary condition to the adhesion of the solution. From the rapidity with which the solution dries, and its perfect adhesive powers, collodion is likely to occupy an important place among the "adjuvantia" of surgical practice.

The diseases of the skin in which I have hitherto used the collodion with advantage are, chronic erythema of the face; intertrigo; chapped nipples and chapped hands; herpes labialis, preputialis and herpes zoster; lichen agrius; lupus non exedens and exedens; acne vulgaris; and several affections of the sebiparous organs. In chronic erythema of the face, its contracting power was most usefully evinced, as it was also in lupus non exedens and acne.

In a troublesome case of chapped hands and fingers, resulting from chronic lichen agrius, the collodion acted not merely as a protective covering, but also promoted the healing of the cracks more quickly than the remedies I have been in the habit of employing. In chapped nipples, it was even more efficient in its protective and curative action, and seemed, in the two instances in which I used it, to work a charm upon the painful skin. The gaping cracks were instantly drawn together, and almost obliterated by the contracting power of the remedy, and were effectually shielded from the influence of moisture, and the pressure of the gums of the infant, and all this in consequence of the rapid evaporation of the ether, in an instant of time. In another point of view the remedy is invaluable as an application to chapped nipples, namely, as being in nowise injurious to

the infant, from offering nothing which can be removed by the lips during the act of sucking, and in this particular, therefore, possessing a vast superiority over the various forms of ointments, astringent lotions, &c.

In four instances it immediately put a stop to herpes labialis, and in a very severe attack, it showed itself to be a powerful and useful remedy. Small superficial ulcerations of the corona glandis and prepuce, caused by excoriation, were cured by a single application, and in a gentleman very susceptible of excoriation, it acted admirably as a prophylactic. From the success of the latter trial, I am inclined to think that it might be usefully employed as a prophylactic, in cases of exposure to syphilitic contagion.

When properly applied, the collodion enters all the crevices of the lines of motion of the skin, and adheres so firmly as to require several washings for its removal. As it is usually prepared, it has the consistence of syrup, and in this state is best suited for those cases in which its adhesive properties are principally needed. Where, however, it is intended to be applied to the surface of an ulcer or abrasion, or to chaps of the skin, I find it convenient to dilute it with ether, and render it almost as limpid as water.

In pursuing this subject, I have made trial of a solution of gutta percha in chloroform, and also in benzene, but these solutions are very inferior to the collodion, for the purposes above named. Their adhesive powers are weaker than the collodion, and the layer which they form when painted on the skin, is apt to rise at the edges and rub off.—*London Lancet.*

Iodine an Antidote to the Venom of the Rattle-Snake. By JAS. WHITMIRE, M. D., of Metamora, Ill.

I wish to say to the profession, through the North-Western Medical and Surgical Journal, that I believe iodine to be an antidote to the virus of the rattle-snake, and, in fact, the whole tribe of serpents.

My opinion, as to the antidotal property of iodine, has been confirmed by many cases that I could give from my case book, in which I used the tinct. of iodine alone, with the effect of putting an entire stop to the swelling and pain, in from twelve to sixteen hours. I have used it in bites of the rattle-snake, viper, and copper-head, on both man and beast, with complete success. My manner of using it is to paint the part that is bitten, and as far as the swelling extends, with three or four coats of tinct. (pharmaceutical strength) twice daily; and should the swelling extend, which it almost always does after the first application, if made any time soon after the infliction of the wound, I follow it up with the paint. By the time the third application is made, the tumefaction will cease to extend, and three or four more applications will generally restore the limb, or part affected, to its natural state, save perhaps an obtuse sensibility to the touch, owing perhaps to the cuticle being destroyed, and some soreness of the muscles, which will remain a longer or shorter period.

A short history of my first acquaintance with this article may not be uninteresting to some of my readers. In June, 1846, I was reading a little work, by Dr. Guthrie, on the use of iodine in enlargements of the joints, goitre, &c., where its remedial effects were ascribed to its tonic effect upon the capillary and lymphatic vessels of the part. During this time, a lad rode up to my office door, and said that his brother had been bitten by a

rattle-snake, and wished me to see him immediately. I had just entered upon the duties of my profession, and, as a matter of course, to use a vulgar phrase, was stumped to know what to do for the boy. I had seen several cases of the kind, and some of them very troublesome ones, too, in which there had been used everything that had ever been recommended, both by the profession and the old ladies. So that it was doubtful in my mind whether there was any remedy known that could be depended upon. I was satisfied that the immediate effect of the virus was a suddenly diffused, low grade of inflammation in the part in which it was injected, speedily extending its ravages until the whole system became a prey to its morbid influence; at which time, fever, parched tongue, delirium, &c., followed in the train. The immediate contact of the virus with the capillary and lymphatic vessels of the part is no doubt the cause of the tumefaction that immediately comes on; the virus destroying natural tone. Either the above is true, or the swelling is produced upon the principle of *ubi irritatio ibi fluxus*. This process of reasoning led me to a trial of the tinct. of iodine. In about two hours from the time the boy was bitten, I saw him. He had received the wound about midway between the internal malleolus and the inferior portion of the os calcis; and the swelling had already extended to within three inches of the knee. There was severe pain in the part, nausea, and occasional vomiting. I proceeded to paint the foot and leg as high as the knee with four coats of the tinct. of iodine, and directed four more coats to begin at bed-time, and repeated in the morning. If the swelling extended above the knee, it was to be followed up with the paint. I then gave my patient a dose of Hoffman's anodyne, and a pretty active dose of epsom salts, with directions to leave the leg uncovered the whole time, and took my leave. The next day the boy came to town, on horseback, to see me. The swelling had ceased to extend about twelve o'clock in the night, and at this time had decreased very considerably. In three or four days, he experienced no inconvenience from the bite, and went about his ordinary occupation.

Since that time, I have had numerous cases of the same kind, all of which have terminated equally well under the same treatment. It is my opinion, therefore, that the iodine, being absorbed, comes in contact with the virus, and neutralizes it, at the same time, giving tone to the engorged capillaries of the part, enabling them to empty themselves of their engorgement. And, if the wound has been inflicted so long that there is effused serum in the cellular tissue, from debility of the vessels, the tinct. of iodine is none the less applicable, as it will speedily promote its absorption.—*North Western Med. & Surg. Journal.*

New Operation for the Radical Cure of Varicocele. By S. D. Gross, M. D., Professor of Surgery in the Medical Department of the University of Louisville.

The following operation for the radical cure of varicocele I have performed eight times within the last few years. The patients were all young men of good constitution, and they all recovered without a single bad symptom. The cure, so far as I have been able to learn, promises to be permanent in every instance.

During the operation the patient may lie down, sit in a chair, or stand up, as may be most convenient. The scrotum, previously divested of the hair, is rendered tense by grasping it behind with the left hand. A vertical incision, scarcely an inch in length, is made over the anterior part of the tumour, down to the enlarged veins, which are next carefully isolated from the accompanying duct, artery, and nerves, by a few touches with the point of the scalpel. This constitutes the first step of the operation. The second consists in passing a short, thick sewing-needle—a No. 1 of the milliner, underneath two or three of the larger trunks, and winding around it a stout thread, either elliptically, or in the form of the figure 8. The ligature is drawn with great firmness, so as to indent the coats of the vessels, and put an immediate stop to the circulation. The operation is finished by closing the wound carefully with one or two twisted sutures, or a few strips of court-plaster. The patient is now put to bed, the scrotum is supported with a silk handkerchief, and light diet is enjoined. At the end of twenty-four, or, at most, thirty-six hour, the blood in the constricted veins is sufficiently coagulated to justify their division, and the removal of the needle. This is readily effected by insinuating a narrow, sharp-pointed bistoury underneath the vessel, with its back towards the needle.

Should symptoms of inflammation arise after the operation, or, in other words, should the parts become red, tender and swollen, recourse must be had to antiphlogistics, and to the application of cold water, or solutions of acetate of lead and opium. The patient may usually sit up in five or six days, and in a few more he may be permitted to walk about. The little wound soon cicatrizes; and the induration, caused by the coagulation of the blood between the testis and the seat of the constriction, gradually disappears by absorption. The period required for this rarely exceeds a month.

The advantages of the above operation are, first, its perfect simplicity, and the facility with which it may be executed; secondly, its freedom from pain and hemorrhage; thirdly, the certainty with which we may avoid injury to the spermatic artery, duct, and nerves; fourthly, the little inconvenience or suffering which the patient experiences after it has been performed; and fifthly, the rapidity of the cure. These considerations will, I think, be found sufficient to recommend this method to the favorable notice of practitioners. Most of the operations described in the books are complicated, severe and dangerous.

It occasionally happens in this affection that the scrotum is very flabby and pendulous. When this is the case the cure will hardly be complete unless the surgeon retrenches the redundant structures. I have been obliged to resort to this expedient only once in my operations. A portion of scrotum, nearly of the size of a large hand, was excised with the scalpel, and the wound closed by the continued suture, which I consider far preferable, under such circumstances, to the interrupted or twisted.—*American Journal of Medical Sciences.*

LOUISVILLE, KY., July, 1848.

EDITORIAL DEPARTMENT.

Cholera at New Orleans.—From a letter by Dr. Wederstrandt, one of the physicians of the charity hospital at New Orleans, addressed to Dr. A. Brigham, of Utica, N. Y., and published in the Boston Med. and Surg. Jour., Jan. 11, 1849, we derive the following items concerning the late visitation of cholera at New Orleans:—The first cases occurred on the 12th of Dec. The two persons first attacked were brought from the ship Swanton, just from Havre. The disease broke out on board this vessel at sea, two weeks after its departure, and seventeen persons died before the vessel reached New Orleans. The two cases in progress at its arrival, were brought to the Charity hospital. The next day, it is stated, “numerous cases appeared all over the city, but principally in the houses nearest to the shipping, or among persons employed on the wharves.” Since the middle of December, 40 and 50 persons had been admitted daily, up to the date of the letter, Dec. 25th. “Upward of 50 cases have originated in the house among the convalescents from other diseases, and the attendants; three of the washerwomen have taken the disease, and two died.”

The duration of the disease has been from three to twelve hours. We quote verbatim the concluding portion of the letter.

“During the first days of the epidemic, nearly all the cases proved fatal; but within the last few days it seems to be rather on the decline, as our admissions and deaths have decreased, and we begin to number many cures, or rather recoveries. We treat the disease on general principles, and according to the indications of each individual case. In the early stage, we have had reason to be satisfied with the preparations of opium and counter-irritants. Some physicians use a large dose of opium and quinine in the beginning, when they get their cases early; they give from thirty to forty drops, and a drachm of tincture of opium, with half a drachm of quinine, for a single dose, and speak highly of their success. In a few cases I have thought that the practice did good, but I have not used it to any great extent. When brought to us, which they generally are, in the cold stage, we use stimulants externally and internally, with nourishing broths, and several have reacted under this treatment, and finally recovered. Males and females, young and old, are alike subjects for this disease; but far more men than women are attacked. We have seen many children die of it, some under five years, and a few old people at a very advanced age. Dr. Watson, in his very interesting and valuable Lectures on the Practice of Medicine, has given a most correct description of the disease as

it now prevails among us, and I believe it to be identical with the Asiatic cholera, which he so ably describes.

I remain, very respectfully yours, JOHN C. P. WEDERSTRANDT.
New Orleans, Dec. 25th, 1848."

It is stated in a portion of the letter preceding the above quotation, that the ship Swanton left Havre with all the passengers and crew in good health, and that the cholera did not exist at Havre, but some of the passengers were from a part of Germany where cholera was raging.

Editorial Changes. Medical Journals.—Prof. Huston has resigned editorial connection with the *Medical Examiner*, and is succeeded by Francis G. Smith, M. D. and David H. Tucker, M. D. Prof. H. is one of the ablest medical critics our country affords, and, during his administration, the *Examiner* has been conducted with talent and independence. The new editors will have abundant cause for gratification with the success of their labors in maintaining the high character which the Journal has acquired.

By a copy of the *Cleveland Daily Herald*, which has been politely forwarded, we perceive that the first number of a new medical journal, entitled the *Western Medical Magazine and Review*, is to be issued on the first of the present month. It is to be edited by J. J. Delamater, M. D., Prof. of Anat. and Phys. in the Cleveland Medical College, assisted by his colleagues as collaborators. It is to be a bi-monthly of 128 pages. We trust that the editor may find in his editorial duties, an agreeable relaxation from the labor and cares incident to his professorial and professional avocations. With such an expectation probably many undertakings of the kind have been commenced; how fully it may be realized, experience will reveal to Dr. D., as it has to those who have anticipated him in a similar experiment. We heartily wish the effort success, extending, as in courtesy bound, to a newly acquired brother of the *corps editoriale*, the hand of fraternal fellowship.

The able editor of the *Southern Medical and Surgical Journal*, Professor Paul F. Eve, has given notice that the Journal will be discontinued after the present year, owing to want of adequate patronage. He states that the privilege of laboring for his readers during the past year, has required, from his own pocket, an outlay of \$900, and he very reasonably concludes that the luxury of serving the medical public on these terms is too expensive to be longer indulged. That a periodical of such merit as the *Southern Medical and Surgical Journal* should require more than the gratuitous services of the editor to secure ample support, is a stigma upon our south-

ern brethren which we sincerely hope they will not consent to bear. We anticipate that the effect of the notice referred to, will be to secure a list of *paying* subscribers, that will not only justify the continuance of the work, but furnish a complimentary testimonial to the value of the editor's past labors.

The *Western Journal of Medicine and Surgery* recently announced that the work would cease, unless subscribers at once signified their wish for its continuance by paying their dues. We are happy to perceive by the last number of our esteemed contemporary, that the required conditions have been complied with.

Rotation in office, it would seem, is a rule of medical editorship, as of politics, in this country. Since our Journal was commenced, a little less than four years ago, fourteen brethren of the *corps* have retired. This fact would imply either that the honors and emoluments of editorial office are so abundant that incumbents are soon satisfied, or else, quite the reverse. We will give an opinion as to which supposition is the most probable, when we conclude, as a Journalist, to make our "dying speech and confession."

Aneurism of Aorta, and Rupture within the Pericardium.

DR. FLINT,

Dear Sir.—The following sketch of pathological appearances observed in a subject at the anatomical rooms of the Medical College during the current course, is at your disposal.

The subject was a female, aged, perhaps, 50, rather fleshy, presenting nothing especially worthy of note except the following:—

On removing the sternum and costal cartilages, the pericardium was observed to be very much distended. Section through it exposed a pint or more of coagulated blood, occupying a position in front, and at the right side of the heart.

On examining for its source, I found a rupture of the ascending aorta two inches from its origin. The rent was perpendicularly in the artery, nearly straight, and three-fourths of an inch in length.

Proceeding upwards, I found a very large aneurism, principally of the ascending aorta, though the arch, and descending aorta, were much above their normal size.

The sack was nearly filled with coagulated blood. On removing this, and moderately distending the parts, I made the following measurement;—

From the commencement of the aorta, around the greatest prominence of the sack, to the origin of the arteria innominata, 7½ inches.

Circumference of the sack, 9½ "

Size of aorta close to a innominata, 5 "

Size of aorta beyond left subclavian, 5½ "

Lower portion of thoracic aorta, 3½ "

At origin of coeliac artery, 3½ "

At bifurcation into iliacs, 2½ "

Length of arteria innominata, 2. "

Circumference at origin, 3½ "

Circumference an inch above, 3½ "

Origin of pulmonary artery, 4 "

The dilatation, was mostly on the right side, and front, of the ascending aorta. The surface was rough, apparently covered with fibrinous deposit. The descending vena cava adhered intimately to it. The pericardium adhered to the upper part of the sack, but the lower portion, where the rupture occurred, and some distance above it, had no such adventitious aid.

The thickness of the walls varied little from the normal state, though in the immediate vicinity of the laceration, the coats were obviously thinner.

The heart, though large, did not appear to be particularly diseased. Such is a brief sketch of the appearances presented in this interesting case, from which, it will be observed, that the ascending aorta was most largely dilated; that the arch, and upper portion of the thoracic aorta were also greatly enlarged; that almost the entire length of the aorta was implicated in the disease, which, in descending, became gradually less prominent. The arteria innominata was likewise much dilated, but the arteries derived from it appeared not above the normal size. The other vessels from the arch presented nothing unusual.

The preparation may be seen in the Museum of the Medical Department of the University of Buffalo.

Respectfully, yours,

BUFFALO, Jan. 15, 1849.

C. L. FORD.

Dr. Dowler.—We observe an announcement in some of our exchanges, of the election of Bennet Dowler, M. D., of New Orleans, to honorary membership of the Philadelphia Academy of Arts and Sciences. This is a merited honor. Dr. D. has contributed scientific observations and exper-

iments, on various subjects, alike original, curious and important. We have not met with any communications from his pen of late. But his mind is too actively bent on investigations calculated to extend our knowledge over the domains of natural phenomena, to rest satisfied with what he has already achieved. The medical public will hear from him anon.

Epidemic Cholera.—Supposing that our readers are desirous of being advised of facts pertaining to the progress of this pestilence in different parts of the world, we shall continue to present such information as we can gather from authentic accounts within our reach. The following is an extract contained in an Edinburg monthly Med. Journal, and copied by the Philadelphia Med. News for January.

The epidemic which we announced in our last month's publication as having invaded this country, has continued to rage with great virulence in Edinburg, where the number of cases now amounts to between seven and eight hundred (including Leith,) of which nearly a half have already proved fatal, about 230 remaining under treatment. A severe epidemic broke out at Loanhead (a village six miles to the south of Edinburg,) and many cases have also occurred at Lasswade, Gilmerton, Portobello, Cockpen, and other villages of the neighborhood. Several cases have been reported in Glasgow, mostly in very crowded and miserable localities; and the disease is also reported to exist in Dumfries as well as in Falkirk, a town whose sanatory condition is far from satisfactory. In England the number of cases has not approached that of the northern division of the kingdom; and, although in London the number has been considerable, yet relatively to the population, it is very small compared with Edinburg. On the week ending October 4th, 65 deaths were recorded in the Registrar General's returns from Cholera in London: on November 11th, 62; on November 18th 54. The epidemic appears, therefore, on the whole, to be decreasing in violence in London. Everywhere the disease appears to have been almost confined to the most wretched and miserable of the population; a few trivial exceptions only to this rule having occurred in London and Edinburg. The mortality has been everywhere nearly the same,—viz., about two-thirds of the recorded cases which have been brought to a termination. It is probable, however, that no trustworthy returns of the whole cases in any place have been yet published.

On the continent it has declined in a great measure at St. Petersburg, Berlin, and Hamburg, where, however cases still occur. On the other hand, Rotterdam has been attacked with great severity since the 1st of October, and Dantzic, from a similar date, has suffered under a still more severe visitation. It is stated that in the small town of Gartz, in the district of Settin, there has been the extraordinary mortality of 102 persons out of a population of 700.

A considerable number of cases of a choleroïd disease prevailed in the beginning of the month in Dunkirk; and a few have occurred in the neighboring villages, and in Calais. M. Magendie was sent by the Academy of Sciences to investigate this alleged ingress of the disease into France;

and reported the cases not to be true epidemic cholera. If we may trust the report of a discussion in the Société de Médecine Pratique, several cases having the strongest resemblance to the disease appear to have occurred in Paris; but there seems to be, on the part of the French physicians, a strong disposition to doubt or deny its presence.

In another portion of the article above referred to, it is stated, that chloroform has been tried assiduously in hospital practice in Edinburgh, but without the least success as regards cure. It alleviates the spasms and other painful symptoms.

The *London Med. Gazette*, Nov. 24, states, that the total number of cases reported, in London, up to Nov. 22nd, to be, 396. Number of deaths 212. This exhibits a very high rate of mortality.

"The total number of cases in England (Boston Med. and Surg. Jour.) up to Dec. 20, amounted to 3737, whereof 1772 had proved fatal; 505 had recovered; and 1400 result not recorded, or still under treatment. The cases in Scotland have been no fewer than 2922, whereof 1356 have perished."

The *Western Lancet* for Jan., states that four cases of cholera have been received at the Commercial Hospital, at Cincinnati. The epidemic has made its appearance at several places on the Mississippi and Ohio rivers.

"*Meachem on Dysentery.*"—Under this caption there appeared in the Editorial department of the last number of this Journal, an article from the pen of "W T.," designed, with the exception of an equivocal compliment, or two, which it pays to the Ontario Medical Society and myself, to expose "the inadvertence so frequently met with," into which those physicians had fallen—to whose practice reference is made in my Address published in a preceding No. of the Journal: "Some relied mainly on astringents, such as acetate of lead combined with Dover's powder." The remarks of "W T." respecting this combination, are based on the supposition that Dover's powder is an union of ipecac, opium, and *sulphate of potassa*. This, it is true, is the officinal preparation known by that name, as directed by the Dispensatory of Wood and Bache—though differing somewhat from the prescription left by the inventor of the medicine, Dr. Dover—and were it to be combined with acetate of lead, an insoluble, and inert sulphate of lead would be formed, as "W. T." observed. But there is a preparation called Dover's powder, used extensively in this section, Vermont, and I doubt not, other portions of the country, which varies from the officinal compound in containing *nitrate of Potassa* as a substitute for *sulphate of potassa*, an article with which, I believe, the acetate of lead is not incompati-

ble. This kind of Dover's powder it was, which was used, certainly by many, and probably by most, of the physicians whose practice "W. T." condemns; so that, instead of administering an incompatible compound, whose product is an insoluble sulphate of lead, they prescribed, scientifically and wisely, a combination of congruous medicines, aptly adapted to the cases under their charge.

T. G. MEACHEM.

Miss Elizabeth Blackwell, M. D.—This lady, having attended two full courses of lectures at Geneva Medical College, and passed a satisfactory examination, received the degree of M. D. on the 23d ult. This, so far as we know, is the first instance of a female graduating at a medical college in this country. Miss B. was refused admission as a pupil at several medical colleges. Her inaugural thesis, as the reader will perceive, is contained in the original department of this number of our Journal.

Case of the Passage of an Iron Rod Through the Head.—The editor of the Boston Med. and Surg. Journal states, that a note, dated Jan. 3d, from the medical attendant of the man who had an iron rod shot through his head, (see last number of this Journal,) reports the patient to be "walking about the house, and riding out, improving both mentally and physically."

Quere. Is there any ground to suspect that the medical attendant may have deceived himself as to the passage of the rod through the head? If not, the case is certainly an extraordinary one, and possesses much interest in its relations to surgery, physiology, and psychology.

BIBLIOGRAPHICAL NOTICES.

A Dispensatory, or Commentary on the Pharmacopœias of Great Britain and the United States, comprising the Natural History, Description, Chemistry, Pharmacy, Actions, Uses, and Doses of the Articles of the Materia Medica. By ROBERT CHRISTISON, M. D., etc. Second Ed. Revised and improved, &c., with 213 illustrations. By R. E. GRIFFITH, M. D., etc. Philadelphia; Lea & Blanchard: 1848. pp. 1008.

The science of Therapeutics has not advanced as rapidly, of late, as that of Pathology and Physical Diagnosis, and we therefore welcome any attempt at its advancement, especially from such a source as the work, whose title we have given. We fully agree in opinion with the editor of the Charleston Medical Journal, that a philosophical treatise on the elements or principles of Therapeutics, is still a desideratum in our language. We have nothing approaching such a work as is demanded by the existing state

of the other branches of medicine;—nothing which presents a clear, consistent and correct account of the *modus operandi*, the physiological effects, and the therapeutical applications of remedial agents. We trust the time is not remote, when this want will be satisfactorily met.

We are pleased with Dr. Christison's work, because it is in advance of most that has been written on the subject. It is not altogether a re-hash of what others have said and written, but contains much that is the result of the author's personal observation at the bed-side, and in the treatment of the sick. The student and the practitioner, are not so much concerned in the botanical, chemical, pharmaceutical and commercial history of drugs, as with their physiological action, and their application to the treatment of disease. The former are not without a certain degree of interest to the medical man, but an acquaintance with them furnishes him no aid in curing the sick; and at this day, when the duration of life seems half adequate to learn and do what seems indispensable to know and to perform, it is the part of wisdom to occupy the mind with what we can turn to some practical use.

The work of Dr. Christison is constructed upon the same plan with that of Wood & Bache, and does not differ materially from it, in its mode of treating the different subjects. The remarks upon the different articles and preparations of the *materia medica*, are full, copious, and sufficiently practical; had the latter been extended even at the expense of the former, the work would not, in our estimation, have suffered in value. As it is, it will be found a very useful addition to the library of every practitioner.

The editor has performed his task with his well known, eminent ability, having added all the processes of the United States Pharmacopœia, and a description of such articles as are recognized in that work, together with many useful tables, and numerous illustrations of medicinal plants, apparatus, &c. The work is for sale at Derby's Bookstore, where all standard medical works may also be had.

C. A. L.

Notes on Medical Matters, and Medical Men, in London and Paris. By DAVID W. YANDELL, M. D. Louisville, Ky. Prentice & Weissinger. 1848. 8vo. pp. 309.

The author of the above is a son of Prof. Yandell, of the Louisville Medical College, who has recently returned from Paris, having resided abroad for two years to complete his medical education. The work consists of a series of letters published, during his residence at Paris, in the *Western Journal of Medicine and Surgery*. The volume is made up of extra sheets

of the letters, set apart for that purpose, as the successive numbers were passing through the press. It is not intended for sale, but for distribution among his friends.

We are indebted to the author for his kindness in transmitting a copy to us. Our readers will recall several valuable extracts from these letters, copied, from time to time, into our pages. They evince a spirit of inquiry, an aptness for observation, and a discriminating judgment, which, with zeal and application, cannot fail to achieve success. Dr. Yandell is quite young. Let him remember that youthful laurels are chiefly desirable and valuable as incentives to aspirations, and industry, which recognise, as a limit to farther exertions, no *ultimatum* of success. It is with every department of knowledge, as Cicero declared it to be with the orator—he who would superlatively excel, must ever aim at what he can never reach—*aliquid immensum, infinitumque*.

Lectures on Venereal, and other Diseases arising from Sexual Intercourse. Delivered in the summer of 1847, at the Hopital du Midi, Paris. By M. RICORD. Reported and translated by Victor De Maric, M. D., M. R. C. S. E. Philadelphia. Ed. Barrington & Geo. D. Hazwell. 1849. 12 mo. pp. 298.

This volume consists of lectures, first published in the London Lancet for 1847-8, which are said to have been reported with fidelity. The latter is all that the reader will require to be assured of, the name of Ricord being a sufficient guaranty for the rest.

Principles of Medicine: Comprising General Pathology and Therapeutics, and a brief general view of Etiology, Nosology, Semeiology, Diagnosis, Prognosis, and Hygienics. By CHARLES J. B. WILLIAMS, M. D., F. R. S., etc. Edited, with additions, by Meredith Clymer, M. D., etc. Third American from the second and enlarged London Edition. Philadelphia: Lea & Blanchard. 1848. 8vo. pp. 440.

The above is the title of a new edition of a work well known to the Profession, and, deservedly held in high estimation. For sale by Derby & Co.

Introductory Lectures—Introductory lectures have been received from James Blake, M. D., Prof. of General and Special Anatomy in St. Louis University, Missouri; Frederick Merrick, M. D., Prof. of Chemistry and Botany in Starling Medical College; Joseph Mather Smith, M. D., Prof. of Theory and Practice of Medicine, College of Physicians and Surgeons in the City of New York; James Bryan, M. D., Prof. of Surgery, Geneva Medical College. We beg to return our thanks for being remembered.

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ORIGINAL COMMUNICATIONS.

ART. I.—*On the Diagnosis of Pulmo-Tuberculosis. A Clinical Lecture.*
By AUSTIN FLINT, M. D., Prof. of Principles and Practice of Medicine,
and Clinical Medicine; Med. Dep't. Univ. of Buffalo.

GENTLEMEN:—During the past three months of clinical instruction, at this Institution, your attention has been directed to numerous cases of tuberculous disease of the lungs, at the hospital and dispensary, and I have endeavored to avail myself of the opportunities which these cases have afforded, to illustrate the positive and relative significancy of the phenomena involved in the diagnosis of this disease. In view of the scientific interest and practical importance of the subject, I purpose, on this occasion, to recapitulate the more important of these phenomena, and to consider, briefly, their character, and the specific value which they possess, separately and combined, as elements of diagnosis. We shall thus not only review, but associate considerations which have heretofore been presented disconnectedly as suggested by the various features of different cases. Such a retrospection will also prepare us to study more advantageously other cases of the disease which will come under notice during the remainder of the session.

For all purposes of practical instruction in diagnosis, pulmo-tuberculosis may be divided into two stages. The first stage will embrace that period (differing widely in different cases as regards time) during which the tuberculous deposit remains in a solid, or crude state—the stage of *crude tuberculization*, as it has been called. The second stage (also quite indefinite in

duration) will embrace the period of the disease which elapses after softening, ulceration, and expectoration of the tuberculous product, have taken place. The diagnosis, in either stage, is based upon phenomena determined by rational and physical methods of investigation. It is, however, with reference to physical signs, more especially, that this division into two stages is convenient. I will, in the first place, direct your attention to the physical signs belonging to each of the stages in succession, and, afterward, to the vital phenomena appertaining to both stages, the latter phenomena being usually distinguished as *rational symptoms*.

Signs Derivable from Percussion in the First Stage.—*Pulmo-tuberculosis is characterised by the deposition in the pulmonary tissues of the heterogeneous morbid product called tubercle. In proportion as this solid material accumulates, the lungs undergo an important physical change. The normal vesicular structure is compromised, the collective capacity of the cells to contain atmospheric air being diminished. This is sufficiently obvious. Now, how is the existence, and the degree of this physical change to be ascertained and measured by percussion? It is evident, that if the relative proportion of the aeriform and solid contents of the thoracic cavity be disturbed in any considerable degree, the sound yielded by percussion should indicate such a change. There must be more or less diminution of the resonance proper to the normal condition. A duller resonance over any part of the chest than belongs to that part in its normal state, is physical evidence that the proportion of solid matter over the gaseous contents, has become predominant. The degree of the dullness, other things being equal, indicates the degree to which the solid material has encroached upon the vesicles containing air. The problem then remaining is, to determine whether this solid material be tubercle; but the question may first arise, is it easy, in all cases, to recognise the presence of abnormal dullness, and to estimate its degree? There is not, it is true, a fixed intensity of resonance belonging to every healthy chest. Different persons differ in this respect, owing to various circumstances. At first view, it would seem that this fact would materially impair the value of percussion. It does not, however, because we never measure resonance by reference to an ideal standard, but by comparison of the two sides of the chest in the same individual. It is a law of pulmo-tuberculosis that it attacks one side of the

* The term *pulmo-tuberculosis* is submitted as expressing the character of the disease better than *phthisis*, the etymological signification of the latter being objectionable, not less than the popular name *consumption*. Pulmo-tuberculosis denotes, what the disease is, tuberculous disease of the lungs.

chest first, always advancing more rapidly in one side than in the other. Hence, the practical point in diagnosis is, not to ascertain whether the sound emitted by percussion is less than it is in the average of individuals, but whether over corresponding regions of the two sides of the chest, it is equal, or unequal. Fortunately for the availability of percussion in diagnosis, the normal resonance of corresponding regions of the two sides of the chest is similar in the same individual. The exceptions to this rule are very rare, and generally explicable by obvious circumstances. Recollect, then, that you have not to determine whether the resonance on percussion is in an *absolute* sense, clear or dull, but whether it be *relatively* so.

But other physical causes than the presence of tuberculous deposit may occasion dullness of resonance, and how are we led to attribute it to the existence of the latter as the cause? Here we are to take into view another general law of the disease; and, also, general laws of other diseases occasioning diminished resonance. Other pulmonary affections attended with diminution, or absence of resonance, are Pneumonitis, and Pleuritis with effusion. Now, the tuberculous deposit almost invariably commences at the apex of the lung, and accumulates especially in the upper lobe. Hence, the physical signs determinable by percussion, are chiefly manifested at the summit of the chest. On the other hand, Pneumonitis as invariably, in the adult, attacks the lower lobe, or lobes, producing flatness over the inferior, or middle third of the chest. The effusion attending Pleuritis gravitates to the lowest portion of the pleural cavity, and is first apparent at the inferior portion of the chest, the flatness extending upward, in proportion as the quantity of fluid accumulates. Another point of distinction is, that the diminished resonance from Pneumonitis, and the effusion of Pleuritis, is more complete. The sound is not *dull*, but *flat*, while the tuberculous deposit seldom takes place so abundantly as to solidify the lung, to the same extent, and, consequently, the resonance is rarely entirely extinct, but only more or less diminished.

In view of the foregoing laws, dullness on percussion over the upper portion of the chest, on one side, considered relatively to the other side, furnishes strong presumptive evidence of the presence of the tuberculous formation. As respects degree of dullness, it may have, in a series of cases, every shade of intensity, from an amount scarcely appreciable, to an approximation toward actual flatness, the variations corresponding, of course, to the degree and extent of consolidation. When the latter are considerable, the disparity of resonance in the two sides is at once apparent. The first tap of the finger suffices to reveal the fact. But when the tubercu-

lous formation is in small isolated masses, or is limited to a small portion of the pulmonary structure, or situated centrally in the lung, it is by no means so easy to decide on the existence of diminished resonance; and, to derive information from percussion, under these circumstances, requires tact, and great care. Much will often depend, as respects diagnosis, upon the decision of the question whether dullness exists, or not. The clavicular, infra-clavicular, and inter-scapular regions, are to be repeatedly explored, for it is in these regions that a disparity in resonance is to be expected. We should also carefully compare the resonance developed by percussion on the top of the shoulder, just above the post-clavicular or acromial space, and over the scapula above the spinous ridge, on both sides. You will recollect cases, among those which have been presented during the session, in which distinct dullness was apparent at the latter points, when, in the regions previously mentioned, scarcely a difference in the two sides was appreciable. I would impress the importance of recollecting this practical point.

You will perhaps inquire, how early in the progress of tuberculosis may the resonance of the chest be modified so as to be distinctly appreciable by percussion? While tubercles are small, disseminated, and separated by healthy vesicles, the sound may continue to appear perfectly normal. The change is, as yet, too slight to be detected by the ear. It may happen, also, that the two lungs on both sides become affected in quick succession, and that, in the progress of the disease, one side is but little in advance of the other. Hence, the difference in resonance may not be obvious. But in a large proportion of the cases of this disease which come under our notice, percussion, at once, affords evidence sufficiently clear and explicit, and we are able often to estimate with considerable precision the amount of solidification, by the contrast in resonance which the two sides of the chest afford.

Signs Declared by Inspection.—Inspection may furnish valuable signs even in the first stage. The deposit of the tuberculous product in considerable quantity, frequently occasions condensation or contraction, the portion of lung tuberculized, occupying less space than the distended normal vesicles of the same portion. Hence, occurs depression in the post-clavicular, or infra-clavicular spaces, and, sometimes, flattening of the upper third of the chest. It is needless to say, that the diagnostic value of this sign chiefly arises from its being present on one side of the chest, as compared with the other side.

Diminished mobility of one side is another sign. On placing the patient in a good light, and attentively contemplating the chest, the upper portion

of one side may be found to undergo less expansion during inspiration, than the other. This shows that the internal distending agent, the atmosphere within the vesicles, has suffered diminution. It may, also, in some cases in part, be due to adhesions over the tuberculous deposit.

Among the cases which have come under our notice, as you will recollect, several have exhibited both these signs, and they are usually associated together, in the same case.

Signs derived from Auscultation.—One of the excellencies of physical signs consists in the fact, that they mutually confirm, or correct each other. In the diagnosis of pulmo-tuberculosis, the evidence of percussion, although highly valuable, is often imperfect and inadequate, and if exclusively depended on, might sometimes lead to erroneous conclusions. This can seldom occur, if, in connection, proper attention be devoted to exploration by auscultation. Moreover, the auscultatory signs are sometimes sufficient of themselves, in so far as physical diagnosis is concerned, in cases in which percussion furnishes little information, or none whatever.

The auscultatory signs involved in the diagnosis of the early stage of tuberculous disease, are several in number. Some of them are by no means striking in themselves, but acquire significance and value from incidental circumstances. Considered separately they would appear to claim little notice, but taken in connection with other facts, they possess hardly less importance, than if they alone furnished specific indications. The first of which I will speak, is *tubular respiration*, or, as it is sometimes termed, *bronchial respiration*.

Whenever the pulmonary structure is solidified, by deposit of tuberculous matter, or fibrin, or by compression, the soft, expansive, breezy murmur produced by the dilation of the pulmonary cells in consequence of the entrance of the air in inspiration, ceases to be heard over the region of the chest corresponding to the solidification. The larger bronchial tubes, however, remain unobstructed: air circulates through them with freedom. What is the result upon auscultation? The vesicular murmur is nearly or quite extinct, and the sound produced by the currents of air in the bronchial tubes, takes its place. In a normal condition of the lung, the latter, or bronchial sound, is not heard, because, first, the vesicular murmur overpowers it, and, second, because the air cells, filled with air, which are interposed between the bronchial tubes and the ear of the auscultator, form a poor conducting medium for the transmission of sound. But these air cells being converted into a solid by tuberculous, or other deposit, the bronchial sound is now not supplanted by the vesicular murmur, and is conduc-

ted with more facility to the ear. This is the mechanism of the bronchial or tubular respiration, which is generally heard over considerable deposits of tuberculous matter.

The tubular respiration is heard with more intensity over the larger bronchia. In parts somewhat remote from large bronchial tubes, for example in the infra-clavicular region close to the clavicle, and near its acromial extremity, the auscultatory sign of consolidation may be simply the absence of all respiratory murmur.

Beginners in auscultation are apt to fancy that the tubular respiration is necessarily louder than the vesicular murmur; but this is not the case. The distinction concerns the character, not the intensity of the sound.

It is heard generally both in the acts of expiration and inspiration, or rather, the sound of expiration is longer, compared with that of inspiration, than when the normal vesicular murmur is present. This fact will be of assistance in the discrimination, until the ear becomes habituated to the intrinsic difference. Instead of being in the ratio of one to three, or five, the expiratory tubular sound may be prolonged to nearly, or quite the length of inspiration.

Next, of *rude* or *rough* respiration. Suppose tuberculous formation to have taken place, not in a sufficient degree, or to a sufficient extent, to occasion well defined *tubular* respiration, but sufficiently to occasion an appreciable modification of the vesicular murmur. There is then an approximation to the tubular character of sound, and this approximation constitutes what is called *rudeness* or *roughness*. In connection with this modification, the expiration may be somewhat prolonged, which will here, as in the former instance, assist us in the discrimination. This rudeness, or roughness, may, in some cases, be appreciable before an accumulation of tuberculous matter takes place sufficient to occasion dullness on percussion. Hence, it is to be regarded as a valuable diagnostic sign of incipient tuberculosis.

In connection with both *tubular* and *rude* respiration, the stethoscopic character of the voice should be ascertained. Bronchophony is by no means a constant attendant upon the former, although due to the same physical condition, but it frequently co-exists, and, when present, will go to confirm the fact of tubular respiration. So, an increased vibration of the voice through the cylinder may be associated with *rudeness*, but not amounting to well defined bronchophony. A vibratory thrill perceptible to the touch (vocal fremitus) also occasionally co-exists, and, therefore, is to be sought for under the same circumstances.

Several other signs belong to the early stage of pulmo-tuberculosis, which

I will mention, briefly explaining the reason of their significance, One of these is a *prolonged expiratory murmur*, even when the character of the respiration may neither be tubular, nor rude. The attention of the profession was first directed to this sign by the late lamented Dr. James Jackson, Jr., of Boston, Mass. Its value is now admitted by the best auscultators. The most rational explanation would seem to be, that the presence of small tubercles, by pressure upon the capillary bronchial ramifications, retard the egress of air from the vesicles, thus prolonging, and possibly, at the same time, developing an increase of sound. Another sign is, *absence of the vesicular murmur, and of all sound*. Another is, a *sibilant rale* and occasionally a *click* at the upper part of the chest. Another is, a slight *sub-crepitant rale* at the end of the inspiratory act, at the upper part of the chest. So far as my experience goes, the latter is a frequent sign of incipient tuberculosis. The value of each of the three last mentioned signs is dependent wholly on incidental considerations, not on their intrinsic character. They are all probably due to sub-acute bronchitis, or, possibly, merely bronchial irritation, situated in the capillary bronchi, in the immediate vicinity of the tuberculous deposit, and occasioned by the proximity of this deposit. Why do phenomena indicating thus capillary bronchitis, or bronchial irritation, become evidences of tuberculization? Because both capillary bronchitis and circumscribed bronchitis, as original affections, very rarely occur. Probabilities are vastly against the supposition of their occurrence except as consequences of the deposit of tuberculous matter. Hence, they may become signs of the presence of tuberculous formation, even before this deposit is sufficient to occasion other positive signs. *But to be signs of tuberculosis they must be limited to a circumscribed space, and that space, in the vast majority of cases, the infra-clavicular region*. Their significance, also, is enhanced, if they are presented on one side of the chest only, or, at least, if they are more marked on one side than on the other. Observe, that these signs are not only intrinsically different, but some of them even opposite in character; but it is not the character of the sign which gives it diagnostic importance, but its being restricted to the summit of the chest, on one side, and confined to a circumscribed space. Persistency, should also be included among the conditions of significance. Hence, we are to satisfy ourselves of the continuance of one or more of these signs by repeated explorations.

Another sign remains to be mentioned. It is, an abnormal audibleness of the sounds of the heart at the summit of the chest, on the left, and even on the right side. The explanation of this is, that solidified lung being a

better conductor of sound than the pulmonary vesicles filled with air, the sounds of the heart may be heard over a tuberculous deposit in regions where, if the lung were normal, they could not be heard at all, or with much less distinctness. This is by no means available as a constant, or prominent sign, being dependent on continuity of the tuberculous deposit so as to be in proximity to the heart. And when it is present, it co-exists with other signs more definite and reliable. But, as affording confirmatory evidence of consolidation, it is well to bear it in mind. I have directed attention to this, among other signs, in some of the cases which have been examined during the session.

Let us now briefly review the several signs belonging to the first stage of pulmo-tuberculosis, with reference to their mutual relations, and to their bearings, separately and combined, upon diagnosis. In a large proportion of the cases of this disease which present themselves, we are able to discover more or less relative dullness on percussion at the summit of the chest, in the clavicular, or infra-clavicular regions. In a certain proportion of the cases in which distinct dullness is not distinctly demonstrable in the regions just named, we shall be able to discover it *above* the clavicle, or upon the scapula. In many cases, to make out this sign requires very little expertness of manipulation, or delicacy of discrimination. In other cases, where the disparity in the two sides of the chest is slight, experience, tact, and a cultivated ear are important. A good auscultator will be able, in some instances, to determine on the presence of this sign, when one less practiced, or less apt, would fail. The presence of relative dullness at the summit of the chest is strong presumptive evidence of tuberculosis; we are not, however, to base our diagnosis on this sign alone, by any means, but to obtain farther evidence by other physical signs, as well as by rational symptoms. The absence of dullness is not conclusive evidence against the existence of tuberculosis. Tuberculous deposit may be present without producing an appreciable modification of resonance, but determinable by other signs, and by symptoms.

In connection with dullness on percussion, we may expect to find, on auscultation, *tubular*, or *bronchial* respiration; or, an approximation thereto, the latter giving rise to *rude* or *rough* respiration, these signs being sometimes accompanied with bronchophony, or an approximation thereto. In portions of the chest remote from large bronchia, even when dullness is discernible, there may be simply extinction of the normal respiratory murmur. The degree of tubular character which the respiration assumes, will depend upon the situation of the consolidation, as respects the larger bron-

chia, and its superficial location as respects the lung. The presence of either of these auscultatory signs, in conjunction with dullness on percussion, renders the evidence for tuberculization greater, and, indeed, in most instances, very conclusive.

In combination with these signs, also, we have, in a certain proportion of cases, confirmatory evidence disclosed by inspection, viz., *depression of the infra-clavicular, or post-clavicular spaces*, and, sometimes, *flattening of the upper third of the chest*. All these signs, it will be borne in mind, depend for all the diagnostic significance which they possess, upon the fact of their being present on one side of the chest as contrasted with the other side, or, at least, more strongly marked on one side.

The other auscultatory signs that have been enumerated are, a *sibilant rale*; *marked feebleness, or absence of the respiratory murmur*; *prolonged expiration*; a *soft sub-crepitant rale*, and *exaggerated audibleness of the sounds of the heart*. One or more of these signs may accompany those previously mentioned. Indeed, they may all be presented in the same case, either simultaneously, or successively. The diagnostic importance of the latter, not less than the former signs, depends on their being limited to the upper portion of the chest, generally quite circumscribed; confined exclusively to, or more strongly marked on one side, as contrasted with the other side; and, singly or successively, persistent in the same place, not observed on a single examination only, but demonstrated by repeated explorations. Associated with dullness on percussion, and tubular or rude respiration, the signs last mentioned will serve to confirm a conclusion already pretty certainly established. But they may possess importance beyond this. In some cases in which tuberculization is not demonstrable by percussion, and by the development of tubular, or well marked rudeness of respiration, these latter signs, singly or collectively, may, when taken in connection with rational symptoms, render the presumption of tuberculosis very strong, if, indeed, they may not suffice for a positive diagnosis. In this point of view, they possess great importance, affording valuable aid at that period of the disease when it is of most practical importance that it be discriminated—viz., its incipient stage.

I pass now to *signs belonging to the second stage of pulmo-tuberculosis*.

It is to be remarked, that the signs belonging to the first stage, may also be continued into the second stage, in a greater or less degree; for all the tuberculous product which a lung contains, does not pass through the processes of softening and evacuation simultaneously. These processes advance in some portions more rapidly than in others. Moreover, the tuber-

tuberculous deposit takes place gradually, or in successive epochs, and fresh deposits may be going on even after cavities have formed. A lung affected with tuberculization, exhibits, generally, after death, the disease in every stage of its progress. Hence, the signs of the first stage, are more or less intermingled with those of the second. We are to mention, as the signs belonging to the second stage, only those that are peculiar to it. And these will claim but a cursory notice, for they are intrinsically simple, easily appreciated, and unequivocal in their character. The diagnosis at this stage is comparatively easy.

The signs characteristic of the second stage declared by percussion are, *an improvement in resonance compared with the preceding stage*, owing to the evacuation of solid tuberculous material, leaving cavities filled with air, - *red ear* *jo sseuunp. ietueix of pus* (*puuoset elom sumoseq Apuenbesuco*) *etes of the chest*, from emaciation. The sound on percussion will vary at different times, in proportion as the cavities are more or less filled with morbid secretions. Occasionally, over a circumscribed space, percussion develops a very clear and tympanitic resonance, denoting the existence of a large cavity superficially situated. And, under these circumstances, the sound is sometimes found to have a musical intonation, called, by the French, the *bruit de pot fêlé*, which, in English, is rather inelegantly rendered, *the sound of the cracked pot*. I have met with a case in which *inspection* clearly indicated the existence of a large superficial cavity, the intercostal spaces being visibly distended over a circumscribed space during acts of coughing, and a sense of fluctuation, at the same time, communicated to the touch.

On *auscultation*, in this stage, we have, when the cavities are empty, or nearly so, the *cavernous respiration*, which in its intrinsic character is identical with the *tubular respiration*, but more intense than the latter, and more circumscribed. The degree of intensity will depend on the size of the cavity, or cavities, the contiguity to the superficies of the lung, and the freedom of communication with large bronchia. Occasionally the cavernous sound presents a musical intonation, resembling the sound produced by blowing lightly into the mouth of a vial, and probably owing to the same mechanism. This variety of the cavernous respiration has received the name of *amphoric*.

Accompanying the cavernous sound in respiration, is that sensation, when the patient speaks, as if the voice entered directly from the mouth through the stethoscope to the ear of the auscultator; sometimes heard with a vividness that is almost painful. We have, then, the vocal sign called *pecto-*

riloquy, the pulmonary sign first noticed by Laennec, leading the way to the discovery of auscultation. This sign, however, it is to be remarked, is not constantly observed even when cavernous respiration is present.

These signs imply that cavities are nearly, or quite empty. If more or less filled with the secretions which constantly take place from their lining membrane, and which accumulate, especially at night, we have, *coarsely crepitating rales*, if the cavities are small, and, if the cavities are large, *gargouillement*, or *gurgling*, occasioned by the motion of the liquid contents of the cavities by the current of air received by inspiration, and by explosive bubbles of air, somewhat as in ebullition.

In connection with these signs we have more or less *mucus* or *bronchial rales* from the presence of secretions in the bronchial tubes, the latter, however, possessing no peculiar significance.

With this brief notice of the physical signs proper to the second stage, I pass to the third division of the subject, which embraces other events occurring in the progress of the disease under consideration, than those belonging to physical exploration—in other words, the *rational symptoms involved in the diagnosis of Pulmo-tuberculosis*.

In this branch of the subject my object is by no means to undertake a descriptive history of the disease, but simply to recal to your minds some of those points which we have found to be specially significant as bearing on the diagnosis. Even in this aspect, due regard for brevity will not permit me to treat of the subject so fully as its merits might claim. I will simply enumerate the symptoms which possess most importance, with short annotations upon each. Recollect that we are now to speak of the diagnostic value of rational symptoms, considered without reference to physical signs. And, *first*, of *cough*. The most important diagnostic consideration as respects cough, relates to its origin, and early history. The question of diagnosis will generally embrace tuberculosis, and sub-acute bronchitis. Now, sub-acute bronchitis usually follows acute bronchitis, which will, of course, have been attended by painful cough, followed by expectoration after two or three days, etc. But, in a large proportion of cases of tuberculosis, the cough, when first noticed, was short, and dry, so continuing for a greater or less period, gradually increasing, as also the expectoration, the latter being often insignificant in amount for a considerable time. In short, the origin and early history of a large proportion of cases of tuberculosis, do not present the evidences of acute, or even sub-acute bronchitis. Consequently, if we find cough to have been developed without the evidences of sufficient bronchial inflammation to constitute an attack of bronchitis,

this is entitled to have considerable weight among the assemblage of rational symptoms pointing to tuberculization. We are always to consider, in this connection, that cough is occasionally due purely to nervous disorder—but it will then be found associated with other evidences of neuropathia, or hysteria, and usually with spinal irritation, the latter, so far as my experience goes, being seldom conjoined with a tuberculous diathesis.

It is to be remarked, that although the commencement of cough without evidences of bronchitis be a symptom of tuberculosis, the fact of its being accompanied by the evidences of bronchitis is, by no means, to influence our decision that it is *not* a symptom of tuberculosis, inasmuch as, in a certain proportion of cases, the tuberculous deposit does accompany, or follow well marked bronchial inflammation.

There are other circumstances appertaining to cough which would claim attention in a full consideration of the subject, but they are secondary in importance to the point just noticed.

Second, of Expectoration.—There are several circumstances connected with the expectoration which are to be considered as favoring the opinion that tuberculous deposit has taken place. I will mention those which seem to me as most worthy of notice:—

a. A scanty, transparent, frothy expectoration for some time after the commencement of cough. The significance of this depends on the evidence which it affords that the cough and expectoration were due to irritation occasioned by the presence of tubercles, not as the effects of bronchitis irrespective of tuberculosis. Cases not unfrequently present themselves in which tuberculization has taken place sufficient to produce well marked dullness on percussion, the cough remaining slight, the expectoration small in amount, and of the character just stated.

b. The occurrence of sudden increase of expectoration, its appearance, at the same time, puruloid; this occurrence taking place once, or successively. This denotes the evacuation of a collection of softened tuberculous matter. The fact of pus corpuscles being contained in the expectoration is now shown to have, in itself, little importance as a diagnostic symptom, since they may be furnished by the bronchial mucus membrane, as well as by the cyst lining pulmonary cavities. But if pus be expectorated under circumstances which render the existence of bronchitis improbable, it becomes a valuable symptom.

c. The expectoration of tuberculous matter imperfectly liquified. This is an event extremely rare, so that pathologists of very large opportunities for observation, have never met with it. It has occurred, however, in an

instance at the hospital during the present course. The patient presented all the evidences, physical and rational, of tuberculous disease, the expectoration being, habitually, tolerably copious, and puruloid. Suddenly, after a violent effort of coughing, he expectorated several sputa which arrested his attention, being unlike anything that he had heretofore expelled, and it was accordingly preserved for my inspection. It consisted, apparently, of tuberculous matter, being in small lumps, the largest of which was about the size of a pea, not round but angular, very friable, like old cheese in this respect; of an ashy white color. The quantity of this expectoration examined; which was commingled with some mucus, would have filled a teaspoon. A similar expectoration never afterward occurred in this case, and he continued under observation several weeks. Simultaneously with the evacuation of this matter, the physical evidences of a cavity were found in the left infra-clavicular region, which had not previously attracted notice.

The occurrence of tuberculous matter, with the physical characters distinctive of it, is, however, too rare to be depended on as a symptom of the disease. Prof. Chomel states, that during thirty years of close attention to the sputa of patients with tuberculosis, he has not been able to satisfy himself of the presence of tuberculous fragments in a single instance.

d. Copious expectoration of purulent sputa at once, or in a short time, and, afterward, comparatively little expectoration for several hours. This is a pretty good symptom of the existence of a cavity, or of cavities, of considerable size, admitting of the accumulation of secretions until efforts are provoked for their expulsion, after which, some hours elapse before a similar accumulation again takes place. This copious expectoration generally occurs in the morning, accumulating during sleep, and frequently a collection to such extent does not occur during the daytime, the cavities being kept empty by expectoration of their contents nearly as fast as their secretion takes place.

Other points relating to the expectoration might be mentioned, but I pass to speak—

Thirdly, of pain.—In the autopsies of subjects dead with pulmo-tuberculosis, adhesions of the pleura costalis and pleura pulmonalis are almost invariably found. They extend more or less over the whole surface of the membrane, are more or less firm, generally, in the latter respect, differing in different portions. They are evidently of an old date, or, at all events, not recent, and, in fact, have taken place at successive periods of the disease, over different collections of the tuberculous deposit. These adhesions, occurring as just stated, are evidences of a series of attacks of sub-acute,

dry, circumscribed pleuritis, which are often indicated at the time of their occurrence by lancinating pains of greater or less severity, and sometimes by febrile movement. In some cases these pleuritic attacks are accompanied by so slight a degree of pain as hardly to attract attention, in other cases they give rise to symptoms which are prominent. They so uniformly enter into the history of the disease, and are so generally denoted by more or less pain at successive periods, that the occurrence of *pleuritic stitches* becomes an important diagnostic feature of pulmo-tuberculosis. In taking the history of cases, you will have observed that I am careful to obtain definite information whether the patient has repeatedly experienced these pains, and in commenting on the rational symptoms with reference to the diagnosis, I have frequently called your attention to this point. The pains are referred to different regions of the chest, at different times, frequently beneath the scapula, or in the shoulder. At the time of their occurrence they are often accompanied by tenderness upon pressure. Percussion in some persons is painful, owing to this cause.

Fourthly, Chills.—In a large proportion of cases, distinct chills, or marked chilliness at times, characterize the rise and progress of the affection under consideration. The occurrence of this symptom, therefore, forms an item of evidence in the diagnosis, and inquiries with respect to it should not be omitted. In some instances, in the incipency of the disease, chills occur, and recur daily, for sometime, with all the regularity of an intermittent. The febrile movement which succeeds is not prominent, and perspiration may not follow. Under these circumstances, while the pulmonary symptoms are so slight as not to have attracted much notice, the case may be regarded as one of intermittent. I have committed this mistake, and know of its being committed by others. Quinia, I may remark, under these circumstances, is not an improper prescription, and will arrest the paroxysms.

Fifthly, Hemoptysis.—The observations of Louis, and others, have shown this symptom to enter so-frequently into the early history of tuberculosis, and to occur so seldom independently of this disease, that it possesses important diagnostic value. It may occur wholly irrespective of tubercoulization, as my own observation have abundantly satisfied me; but, yet, even if it were the first and, at the time, the only symptom, I should regard it as furnishing strong grounds for suspicion. Associated with other pulmonary symptoms it is entitled to great weight. It is explained by the local congestion produced by, and perhaps existing prior to, the deposit of the tuberculous product. It is important, of course, to ascertain that the hemorrhage is from the lungs, not from the stomach, pharynx, or posterior

nares. We are also to satisfy ourselves that it is true hemorrhage, not merely mucus secretions streaked, or tinged with blood.

Sixthly, Accelerated or Embarrassed Respiration.—If the tuberculous deposit have taken place in considerable quantity, and, especially, if it have taken place rapidly, the respiration will usually be affected. The respiratory acts will be more or less increased in frequency; there will be some habitual labor of breathing, together with more panting on exertion, as in walking, ascending stairs, etc., than is explicable by reference to the circulation, or muscular debility. The *ala nasi* frequently indicate embarrassment of respiration. Generally, the patient does not complain of dyspnoea, so that we must determine the abnormal deviations from health, in this particular, by our own observations. The respirations should be enumerated, and carefully examined, both when the patient is tranquil, and directly after some muscular effort.

Seventhly, Emaciation.—The functions of assimilation deteriorate from the commencement of tuberculous disease, as evinced by impaired nutrition. Emaciation may go on more or less rapidly, but it is progressive. What is lost, is not regained. The exceptions to this law are so few, as hardly to militate against its correctness for all practical purposes of diagnosis. Constant, although very gradual diminution of weight, therefore, is evidence in favor of this disease, and definite information should be obtained, if practicable, with respect to this point.

Eighthly, Pallor of Complexion.—Marked pallor of the complexion is so common a concomitant of tuberculosis, as to deserve being included among the evidences of this disease.

Ninthly, Accelerated Circulation.—An abnormal frequency of the heart's contraction is a very constant symptom of tuberculosis, although, as respects degree, there is much variation in different cases. The pulse is usually more or less accelerated, and this is a persistent symptom. The frequency even may amount to, or exceed, 100, before many of the unequivocal evidences of the disease are developed. The pulse also exhibits a quickness, and vibratory character, in many cases, which is peculiar, giving rise to what has been aptly designated "tuberculous fever." Permanent acceleration of pulse, especially with the peculiarities just referred to, is one of the most reliable of the rational evidences of this disease. I have also been led to regard it as possessing more importance than any other single symptom, as a criterion of the rapidity of progress, which the disease is making. I think we can form an opinion with regard to the probable duration of the disease, better from this symptom,

than from any other. If the pulse be notably and persistently frequent, we may be assured the disease is progressing rapidly, and will run comparatively a short career.

Tenthly, Diarrhœa.—I do not now refer to the colliquative diarrhœa incident to the last stage of this disease. In its earlier periods there is a tendency to diarrhœa in many cases. It occurs at intervals, and is usually of short duration, subsiding spontaneously, or relieved by remedies. This is sufficiently common to entitle the fact of repeated attacks of diarrhœa to be included in the present category of diagnostic symptoms characterizing this disease.

Eleventh. Hereditary Predisposition.—This can hardly be included, with strict propriety, among the *symptoms* of tuberculosis, but a family tendency to the disease should not be overlooked in the diagnosis. That such a tendency may be inherent in the constitution, and be transmitted to offspring, are facts abundantly established. It has also been observed to pass by one generation, and reappear in the next. The point, therefore, should be ascertained, in all cases, whether progenitors, immediate or remote, have been affected with tuberculous disease, and if there are grounds to suspect the existence of an inherited predisposition, this fact should add weight to the probabilities derived from symptoms and signs. In the diagnosis of the incipient stage of the disease this point possesses considerable importance.

I have thus, gentlemen, passed in review the more important of the phenomena, rational and physical, involved in the diagnosis of pulmo-tuberculosis. I have omitted some of the more obvious and unequivocal evidences which are presented in the last stage, or after the character of the affection is sufficiently declared, for example *hectic paroxysms, œdema of the extremities, dyspnœa*, etc., my object having been to direct your attention to those elements which it may be important to take into account while the diagnosis is a matter of question. Of the importance of a correct diagnosis it would be superfluous to speak. It is to be borne in mind that the discrimination is important in a two-fold aspect. It is certainly important to be able to decide on the existence of tuberculosis when it *does* exist, and it is not less important to be able to decide correctly when it *does not* exist. A diagnosis early in the disease is also, for many reasons, highly desirable. The frequency with which cases will come under your observation, claiming decision upon the existence or non-existence of the disease, moreover, should commend the subject to your earnest study.

You are to arrive at a diagnosis by means of the combined testimony

afforded by physical and rational methods of examination. Considered separately, physical, furnishes far more definite, reliable information than rational investigation; but as the object is to render our conclusion as certain and demonstrative as possible, neither method should be pursued to the exclusion of the other. We are to take a comprehensive view of all the facts, before forming an opinion; and in order that one may be qualified to do this, readily and satisfactorily, whenever cases present themselves, the various elements which the diagnosis involves are to be fully appreciated, singly and combined, and this knowledge is to be stored in the memory for practical application at any moment. It is an useful exercise here, as in other instances, occasionally to refresh the memory by recapitulating the several diagnostic points and considerations which the subject embraces. To assist you in so doing, with reference to the important disease selected as the subject for this occasion, has been my motive for submitting the foregoing hastily prepared remarks; and, by way of encouragement to the study of this subject, permit me to say, in conclusion, that, with due attention to the several signs and symptoms which I have enumerated and briefly commented on, you will experience but little difficulty in the diagnosis of pulmo-tuberculosis, even in a very early period of its existence; and under circumstances which will set at fault the judgment of those less familiar with the means of arriving at a correct conclusion. The satisfaction and advantage which you will derive from well grounded confidence in your ability to discriminate the disease, will sufficiently compensate for all the labor which proper qualification requires, without reference to other incentives of a higher and more disinterested character, which, I doubt not will both suggest and commend themselves to your reflections.

Feb. 1849.

ART. II. *Three Cases of Hare Lip: in one of which the Operation resulted in Death.* Reported by Dr. HAMILTON.

Case 1. August 2d, 1848, I operated on the infant son of the Rev. Mr. Wilson, of Elbridge, Onondaga Co., aged five months. The child had a fair constitution, but for a short time had suffered from a mild form of diarrhoea. This continuing slightly after the patient arrived in town, I deferred the operation for a day or two, when, the diarrhoea having sensibly abated, I operated. The fissure was single and extended through the hard and soft palate. I operated by closing the wound with common interrupted sutures, two large and two small, but substituting "collodion" plaster

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instead of the "patent." At the end of forty-eight hours I removed three of the sutures and the fourth on the fourth day. The wound healed kindly and union was complete by the fifth day. I renewed the plasters after the third, every other day, until the seventh. The weather was during this time, very warm, and the diarrhoea had continued in a still abated form up to the night of the seventh. He had taken food regularly, yet on the night of the seventh day he looked unusually pale and seemed languid; on the morning of the eighth he awoke apparently as well as usual, but on attempting to feed him, it was noticed that he could not swallow. In a very few minutes, and before I could reach the house, he gradually sank away and died.

A *post mortem* was cheerfully granted by the intelligent parents, and with Dr. Flint, I made an examination in the morning of the same day.

Autopsy.—Ventricles of brain containing about four ounces of serum, and no other diseased manifestations within the cranium. The viscera of the thorax were sound, and also of the abdomen, save that at seven distinct points of the small intestines an intussusception existed, involving at each separate point from two to twelve inches. The intussusception, we believe, must have occurred in the article of death, since the bowels had continued to move occasionally, once in eight or ten hours, until the evening preceding.

This case is given as one illustration of the fact that no operation can be made with the same safety upon an infant as upon an adult: for, although the season was warm and the child was actually suffering under a mild diarrhoea, yet it was too mild to have in itself proved a cause of death. The intussusception we mention as a singular circumstance, but it did not produce death, nor do we think that the serous effusion in the brain was anything more than one of the consequences of the general irritation and consequent exhaustion. In short this child died in consequence of the irritation of an operation in connection with a mild diarrhoea; and it ought to teach us not to operate generally upon infants when suffering under any derangement of the bowels, nor perhaps during that season of the year when they are especially liable to such derangements. It is one illustration also, as we have above said, that, contrary to the opinion of some good surgeons, there is not the same safety in operating for hare-lip upon an infant as upon an adult; for the same causes which have produced death here would not have been sufficient to produce death in an adult. This truth ought then be fairly given to the parents before an operation is made.

Case 2. On the same day I operated upon the infant daughter of Mr.

—— of Seneca Falls—aged three months. This child had also a slight diarrhoea. The cleft was very wide and extended through the hard and soft palate. The bone on the right side of the cleft had thrown off once or twice a slight exfoliation, and the mucous membrane over it was not healthy. I used in the operation the same number of sutures and the same dressings as in the first case. I removed three sutures on the second day and the fourth on the fourth day. The second time I applied the colodion plaster the child strangled, and afterwards I used common adhesive plaster. She bled pretty freely in the operation, much of which blood being swallowed, increased the diarrhoea. About the eighth day an erysipelas attacked the lips, producing an ulceration at the upper part of the wound which soon dissolved the union at that point. The erysipelas rapidly spread over the whole face and scalp, and the child was with difficulty saved.

This case is scarcely less instructive than the first and ought also to impress upon us the greater hazard of early than of late operations: not that erysipelas may not attack a wound made at any period of life, and at least twice this has happened with me in operations for hare-lip made upon adults, but because when it does occur it is much more likely to prove fatal to the infant than to the adult.

This, as my pupils know, is no new doctrine with me, but it is what I have always taught and still firmly believe, although Dr. Mutter and Dr. Mason Warren, whose experience has been considerable, think differently.

I do not however advise waiting longer than the second year: because although there is still more danger than would exist at a later period, yet the danger is so greatly diminished that it is now quite outweighed by the fact that the earlier the operation is made, the more complete will be the restoration of both the lip and palate. *The period immediately preceding or succeeding dentition ought generally to be preferred.*

Case 3. Mary ——, aged thirteen months—Double hare-lip. Last winter I operated upon this child. There was then a double fissure, and the central piece of integument was pushed forward by bone so that it lay on the same plane with the ridge of the nose; this piece of integument was too short and too narrow to make use of it in supplying the deficiency in the lip. I removed the bone, and then carried the skin covering it directly back, so as to form of it a columna nasi, and secured it in place with sutures.

Sept. 26, 1848, I operated again. Dissecting up the lip on each side, and abrading the edges, I drew it together with four strong interrupted

sutures: over this common adhesive straps were applied without compress or roller. The plasters held so firmly that I did not disturb them, or renew the dressing in seven days. The patient was then, without my knowledge, carried home, some fifteen or twenty miles in the country. The parents thought, as I understand, that the cure was completed and that nothing more was to be done. I have only learned since that the case did well. When or how the sutures came out, I have not been informed.

ART. III.—*Treatment of Fractures. Cases.* By Z. PAUL, M. D. [Communicated in a letter to Dr. HAMILTON.]

Having become convinced that the practice of dressing fractures (and more especially fractures of the fore-arm) with the roller as laid down in the books, is useless, if not absolutely injurious. I have adopted a modification of the usual mode of dressing these bones, and with what success the following cases will show:—

Case I. Dec. 25th 1842.—Mrs. S.; aged 70. Transverse fracture of the lower third of the radius and ulna; fragments displaced.

I dressed it in the following manner. Having reduced the fracture, I placed a compress on the palmar and dorsal sides of the fore-arm, and over these a couple of splints, extending from the ends of the fingers to near the elbow, and tied them on with common tape. Leaving the limb thus lightly covered, there was very little swelling and no pain after the first dressing; the fracture united readily and without deformity.

Case 2. July 26th, 1846.—S. D.; a girl, aged 12. Oblique fracture of the middle portion of the fore-arm; radius and ulna both broken. Treated as the first, with the same results.

Case 3. July 28th, 1846.—P. R.; a boy, aged 6. Fracture of the upper third of the radius. Treated as the first; result, the same.

Case 4. August 30th, 1846. W. H.; a girl, aged 2. Transverse fracture of the middle portion of fore-arm; both bones broken. Treated as before: result the same.

Case 5. Oct. 20th, 1846.—W. B.; a boy, aged 8. Compound fracture of the middle portion of fore-arm: the radius protruded through the skin. Treated as before, with the same result.

Case 6. C. P.; a girl, aged 8. Oblique fracture of the lower third of fore-arm, with dislocation of the distal end of the ulna. Treatment and result the same.

In no one of the above cases was there but very little swelling, and no

discoloration of the skin; and in no one was there any pain experienced by the patient.

You may ask, what is gained? I reply, nothing is lost: and I have dispensed with unnecessary bandages. But actually I think I have gained something, since I have not, under this treatment, witnessed so much swelling and inflammation.

What is required in all cases of fracture is just dressing enough to keep the bones in place; a roller will not do this without splints, and if the splints are rightly adjusted with compresses, and tapes in three, or at most, four places, (i. e.) at the upper and lower ends, and one or two intermediate, they will be sufficient.

The roller keeps the limb too warm, and thus increases the inflammation, the very thing which we wish most to avoid. The swelling makes the roller and splints press unequally, and deformity is the result. In one instance I have seen inflammation, suppuration and sloughing in consequence of excessive bandaging of the arm after a fracture.

Yours truly,

Z. PAUL

HONEYOYE, Dec., 1848.

If the reader will refer to the Report of the Surgical Dispensary of Buffalo Medical College, vol. 3d, page 731, of this Journal, a case will be found of fractured ulna (case No. 4) dressed in the manner detailed in the above article, and for the reasons (as stated in the report) assigned by Dr. Paul.

EDITOR.

ART. IV.—*Case of Calculi in Perineum and Bladder.* Lithotomy by Prof. EVE, of Georgia. Communicated in a letter to Prof. HAMILTON, by OWEN MUNSON, M. D.

AUGUSTA, Ga., Jan. 12th, 1849.

DEAR DOCTOR:—As you are devoted to surgery, I have thought you might be interested in the report of a case that I have recently witnessed. I have availed myself of the polite invitation of the Professor of Surgery, and others of the Faculty, to attend the Clinical Lectures, and surgical operations, &c., as my time or inclination might dictate. I was present at the Hospital last Saturday (8th inst.) to witness the operation of lithotomy, by Dr. Paul F. Eve, Professor of Surgery in the Georgia Medical College located in this city. The patient, Mr. Samuel O'Bannon, is a man of about 40 years of age. According to his own story, his back was injured by the falling in of the roof of a building in process of erection some 24 years

ago. Partial paralysis of the lumbar region, and consequently, difficult micturation, immediately supervened. But for the last few years urination has been attended with the greatest difficulty, and most excruciating pain.

During the years 1845 and '6 he was enabled to urinate only in the sitting position; and for the last two years he has been compelled to lie down on his right side, place his left foot on his right thigh, introduce the index finger of the left hand into the rectum, and by a sudden motion of the finger throw one or more calculi forward, which would allow a small quantity of urine to flow, and then the passage would again close up. It was only by continuing these manipulations for hours at a time, that he was enabled to relieve the bladder. Severe prolapsus ani was thus produced. The feel produced by placing the hand, or ends of the fingers on the perineum, was very much like that of pebbles tied up in a buckskin bag. The patient said that when he sat down, the cracking and grinding, produced by the friction of the calculi in the perineum reminded him of sitting down on snow.

So great and for so long a time continued had been his sufferings, that he was worn down to a walking skeleton, and life had become intolerable. He was convinced that nothing but death or surgery could relieve him. And so little of hope and encouragement were held out to him by the latter, taking into account his extreme debility, the long standing and extreme difficulty of the case, and the severity of the operation, he seemed not to care in what way his sufferings were ended. Night and day for almost a quarter of a century, he said he had suffered martyrdom. He finally determined to submit to the operation, as affording his only possible chance for relief. After putting him under the full influence of chloroform, Dr. Eve commenced the operation in his usually bold, dexterous and efficient manner. In a very short time the Dr. extracted fifty-seven calculi from the perineum, which were firmly impacted in the cellular tissue. This done, he entered the bladder, from which he extracted sixty more, making a sum total of 117. The largest weighed three drachms, 17 grains. The smallest, less than a pea in size. Aggregate weight, 43, 33, 10, and 18 gra. And what is peculiar, every one tetrahedrons, perfectly smooth, and of a dun or leaden color.

Jan. 12.—I have just seen the patient and find him doing well—has walked through a long hall this afternoon, to another room. Wound healing kindly; no offensive smell; tongue clean; appetite good; bowels regular; urinates freely through the urethra; pulse soft and natural,—and in short the poor fellow has every appearance of speedy recovery.

ART. V.—*Transactions of the Medical Association of Southern Central New York. Convened at Ithaca, June, 1848.*

The formation of an Association for Southern Central New York, embracing the counties of Chemung, Tompkins, Tioga, Cortland, Broome and Cayuga, was noticed in a former number of this Journal. The Association has been instituted by some of the most eminent members of the profession in these counties, to promote interchange of professional views, and mutual improvement. The transactions of the meeting held in June last are just published, making a pamphlet of 16 pages. The meeting appears to have been well attended, and the proceedings promise well for the Association. Committees were appointed to prepare essays on voluntary subjects, and to report on endemics and epidemics in the several counties which the Association embraces. The plan seems to us admirable, and we should rejoice to see the example followed in other portions of the Empire State. If meetings of the County Societies generally are as barren in interesting or useful transactions as in some counties that we might mention, there is abundant room for improvement, and it may be worthy of consideration whether the union of the profession of several contiguous counties, to form a single association, will not be preferable to the present system of a distinct society for each county. The publication of the transactions of medical societies is desirable, as a means of diffusing valuable information, and as an inducement for individuals to contribute the results of their observations and reflections. If the plan, in this respect, of the Association of Southern Central New York were to be adopted generally throughout the State, the annual information concerning endemic and epidemic diseases in different sections, would, alone, be highly valuable. We beg leave to commend this subject to the consideration of our medical brethren, not only in this State, but in sister states.

We quote from the 'Transactions' the following digest of an essay on *Lumbar or Psoas Abscess*, submitted by Dr. Hyde, of Cortland:—

"Dr. Hyde, of Cortland, next read a very full essay on lumbar, or psoas abscess. He referred to the results of his observation of some 30 cases which had occurred in his own practice, and those of his professional neighbors within a circuit of about thirty miles, and during a period of 13 years. The disease had occurred in patients between the ages of 18 and 70 years, in a majority of instances, however, in those between 40 and 50 years of age. His conclusion from statistical examinations was, that cases of this affection were far more frequent in this and the New England States, than in the southern portions of our country. Of the whole number of cases which he had observed, five only were females, and but one of these exhibited the physical conformation recognized as the scrofulous diathesis. Of

the 25 males who had the disease, two only gave evidence of possessing the strumous habit, while the remaining number were of vigorous constitution; affording no suspicion either of scrofulous or tubercular predisposition. The period of the disease varied from two months to seven years. The majority of the cases were of about three years' duration.

The earliest *symptoms* of the affection were rarely observed, since the patients seldom presented themselves for professional advice, until such severe structural changes had taken place, as to render a diagnosis of little value as a basis for successful treatment. There was, however, a marked want of identity in the earlier symptoms that were observed, so much as to embarrass the arrival at correct conclusions, even so late as the external pointing of the abscess. Post mortem examinations, however, showed an identity of pathological conditions, both of the original structures involved, and the results of the diseased process. As to the etiology of the disease, the writer was fully of the opinion, that, in the instances cited, at least, it originated in a concurrence of accidental causes, rather than from any predisposition to it, identical with the physical organization; believing, however, that similar causes would more readily excite the disease in one of a strumous habit, than in one possessing an originally sound condition. *Pathology.*—Of the thirty cases observed, nine were examined post mortem. In only one instance did he find disease of the spinal column. The result of these examinations forced upon him the conviction that the structures originally affected by the morbid process, were, either the psoas muscle, or its immediate envelops; and that cases which show an alteration of vertebral structure, are instances of tissues involved by the extension of the original disease. The *prognosis* is decidedly unfavorable. The writer had never witnessed a single recovery in a well marked case of the disease. Several cases gave strong promise of ultimate recovery, but eventually the disease returned with exasperated symptoms and terminated fatally. It was suggested that the *diagnosis* of the disease in its earlier stages might be made by observation of the deranged function of the psoas muscle, in reference both to the movement of the body and extremity, the position of the limb in relation to the body, both in erect and recumbent postures, and by attentive consideration of the pain when compared with that of real lumbago. The *treatment* that gives any promise of success, must be applied in the earliest inflammatory stage. When pointing took place, the writer recommended the evacuation of the abscess after the method of Prof. MILLER, of Edinburg."

The conclusion of Dr. Hyde, as respects recovery, we suspect to be more unfavorable than a larger number of observations would warrant. The disease, it is true, will prove fatal, sooner or later, in a large proportion of cases, yet recovery not unfrequently takes place, especially if the spinal column be not involved, and the subject be not of a scrofulous diathesis. Two instances of a favorable result were communicated at the monthly meeting of the Medical Association of this city in January last, and a third at the meeting in February; in the latter case the affection having been of long duration, and the spine evidently implicated.

We do not profess to have had much practical acquaintance with the

disease, but circumstances have led us to bestow upon it, of late, anxious reflection; and we are disposed to think that confinement and quietude, together with antiphlogistic treatment, are often far from promoting a cure. The chief source of danger is the exhaustion produced by protracted purulent evacuations; and, it is to be considered, that, if not occurring in connection with scrofulosis, it is apt to be associated with an cachectic habit. The indications of treatment, under these circumstances, are, first, to improve the constitutional vigor by tonics, nutritious diet, fresh air, and moderate exercise; and, second, to restrain, as far as possible, the formation of pus. The general remedies mentioned under the first head, are appropriate to the second, but, in addition to these, the local measures recommended by Prof. Brainard, of Chicago, viz: injections into the cavity of the abscess of astringent fluids, deserve trial. In a large proportion of cases, when the character of the disease is first ascertained, whatever inflammatory action may have existed, has ceased to exist. The treatment which might have been due to an inflammation, is, therefore, now not called for. We have only the products and consequences of the inflammatory action, and to carry the disease to a successful termination, it is necessary to preserve and strengthen the power of the system, so that it may triumph by its endurance and sanative energies. We throw out these few ideas, and shall be glad if they provoke communications from some of our readers.

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Case of Glossitis. By W. MARSDEN, M. D., Quebec.—Having had two cases of that uncommon, afflicting and dangerous disease, "Glossitis," in the course of my practice, I forward them to you, hoping you will find them sufficiently interesting to give them a place in your journal; and that they may tend to throw some additional light on the pathology of this alarming affection, especially as the results were, in neither of these cases, exactly like any reports that I have yet met with.

CASE I.—Miss Lemire, of Grand St. Esprit, set. 13, called on me at about 11 o'clock, A. M., on Wednesday, the 10th of July, 1844, with a swelled tongue. She was of healthy appearance, full and regular habit of body, sanguine temperament (rather lymphatic), and had not yet menstruated. The history of her case was, that she was walking out on the previous evening in the night air, without bonnet or shawl, and that, just on retiring to rest for the night, she felt slight pain in the tongue, which quickly increased in intensity, and became lancinating; followed by swelling, which

also continued to increase during the night, and until the time that she called on me. Her appearance was now peculiarly distressing, and her countenance expressive of the greatest anxiety and pain. Her tongue protruded some distance beyond the teeth, both laterally and at the front; and her breathing was almost entirely carried on through the nose. The teeth were upwards of half an inch apart, and the tongue entirely filled the cavity of the mouth. The tongue presented a remarkable appearance of glossiness, redness, and hardness, and was coated with viscid mucus.

¶ My reading being fresh on this subject, I immediately suspected the nature of the case, although I had never seen one before, and resolved on the mode of action at once; which was effected in less time than I can describe it, and was followed by the most happy results.

Having got the person who accompanied her to secure her head, I opened her mouth as wide as possible, by depressing the lower jaw, and introduced a scalpel along the upper part of the tongue upon its flat surface, and then turning it upon its edge, I cut my way out, by making a deep, full incision into its most elevated part—completely from its base to within less than half an inch of its apex. This incision was immediately followed by a considerable discharge of albumen or coagulable lymph of about the color and consistence of calf's foot jelly, together with about an equal quantity of blood. Her breathing at once became easy and natural, and the tongue returned within its natural and ordinary bounds. She spoke, almost immediately, with surprising distinctness, expressing her grateful acknowledgements for the speedy and effectual relief she had obtained; and she replied, in answer to my interrogatory, that the pain of the operation was comparatively trifling. After washing the mouth for some time with warm water, to encourage the bleeding, if possible, she returned home without adopting any other remedial means, and I did not see her again until the following Sunday, four days after, when the only trace of her sufferings that remained, was a slight mark along the surface of the tongue, a little to the right of the raphe, looking like another raphe, but not the slightest trace of swelling remained. I will now report the other case and reserve my further remarks until I have done so.

CASE 2.—Miss M——, ætatis 18, daughter of R. M——, Esq., of the Commissariat Department, was attacked with swelling of the tongue, on Saturday evening, the 9th of July, 1848, having ridden in a covered carriage, the day previously, with the blinds and sides open, and her bonnet and shawl off, to enjoy the air, the weather being warm. This young lady was under the treatment of the medical officers of the army medical staff, from Saturday the 15th of July; and a few days after, also of a civil practitioner, until the 26th of the month, when I was first requested to see her, but declined, for reasons of a private nature with reference to the gentleman last referred to. On the 28th, however, on again being urgently requested to visit her, I did so, at first alone, and afterwards met Dr. M——, D'y. Inspector of Hospitals, who, in common with the other parties that had seen her, entertained the most unfavorable opinion of the case. I will now give her own history of it. She stated that she had, at times, for about five years past, been troubled with swelling of the tongue, which had always subsided previously to the last attack, by the *immediate* application of heat and heated flannels to the head, which were continued for a few hours; but that the right side of the tongue had remained slightly and permanently

enlarged since the first attack. She always attributed these swellings to cold; and on the last occasion she cannot account for the obstinacy of the attack.

Among the local applications that had been used by her medical advisers, previous to my being called in, were—blisters to the neck and throat; leeches to the neck, throat, and tongue; warm or hot water injected into the ears, and hot oil; frequent applications of lunar caustic to the anterior and lateral portions of the tongue, which was covered with sloughs; repeated scarification of the dorsum of the tongue with the lancet, poultices, &c. And among the general means employed, croton oil was, I believe, the principal. At the stage of the disease when I first saw her, there existed great nervous prostration, emaciation, and irritative fever, with a quick, small pulse, ranging from 108 to 130.

On the 29th, I again met Dr. M——, and after stating to him the result of my own experience in Lemire's case, besides referring to some published cases, I urged the propriety of one or more free incisions into the substance of the tongue. He replied, "that *he had cut deep enough* with the lancet, if the tongue contained matter;—that it was cartilaginous;—and that it gave no indication of the presence of matter," &c.

I then referred especially to that portion of the case of "Charles Martin, Surgeon of the Island of Mull, reported in the 28th volume of the Edinburgh Medical and Surgical Journal, at page 76, by Dr. John Aitkin," where he says, "previous to the first incision being made, I could not possibly determine, either from existing symptoms, or by external examination, whether or not there was a collection of pus. Could I have satisfied myself of this, I would not have prolonged the patient's sufferings by employing the lancet, but would have had immediate recourse to the knife. As the matter was deeply lodged in the substance of the tongue, I remained ignorant of its formation until the scalpel was used."

I failed, however, to convince him, and the young lady continued suffering until noon the next day, when he had recourse again to small incisions *with the lancet*. At seven in the evening I met him again (although not by appointment) in company with Dr. L., an army surgeon who happened to be on a visit to Quebec, when I again urged my views of the case, in much the same terms I had before used to Dr. M.; but the only result was a repetition of the assertion, that the tongue was cartilaginous—that nothing that had been done for her had been of any service, and that the tongue *did not contain matter*, in which both gentlemen concurred; and on my persisting in urging a free section of the tongue, Dr. M. declared *sotto voce*, "any one may cut deeper that chooses, but I have cut as deep as I dare."

As Dr. M.'s view of the case was hopeless, and yet he would not himself adopt the plan I had suggested, and which I felt confident was the only course that could afford relief, I at once resolved (as the patient was willing) to bear the *onus* of my treatment alone; and almost an hour after this I proceeded to operate.

Having removed the patient from her bed, and seated her in a chair, her father securing the head, I proceeded, as in the former case, to depress the lower jaw, and with some difficulty, (the lancing at noon having increased the swelling)* introduced the scalpel over the dorsum of the tongue, on its

* By making slight incisions or scratches, the inflammatory action and the patient's sufferings are increased—extending the jaws still more apart when they are already painfully wide asunder.

flat surface, and then, turning the sharp edge towards the most elevated part, cut my way out, making an incision, so full, that I could completely bury my index finger in the cavity.* The incision was followed by a discharge of dark black greenish *fætid matter*, to the extent of about an ounce and a half, (the smell of which impregnated the whole room, so as to render ventilation necessary,) and a small quantity of venous blood.

Therelief afforded was almost immediate, and the expressions of grateful satisfaction and delight of the patient unbounded. She stated that the operation had given her less pain than "the lancing," and that the relief was immediate; whereas, *each application of the lancet was followed by increased pain and swelling*. Among the observations she made, as soon as she could articulate, was this remarkable expression, "That until now it seemed as if the doctors had only been instruments of torture in the hands of the Almighty;" although she neither repined or reproached them, but was thankful for all their unavailing efforts in her behalf, attributing her prolonged and grievous sufferings to some demerit of her own. Subsequently to the operation, I used an astringent gargle, for a few days; and have regularly used the *potassæ hydriodas*: which she still continues. The tongue is now reduced to its ordinary size and condition; and there is a slight depression about half an inch to the right of the centre of the tongue in the course of the incision made.

REMARKS.—There can be no doubt, from the history and treatment of these two cases, that the disease was one of a violently inflammatory character. For a more full history of this disease, I would advise the reader to refer to the case of Martin, before alluded to; and to the *Journal Universel*, &c., June 1823, xxx. 367, which is referred to in the *Edinburgh Medical and Surgical Journal*, page 285, vol. xxi. The author of the paper from which the notice is extracted, refers the reader, in particular, to a treatise on the subject in the 5th volume of the *Memoires de l'Academie de Chirurgie* by de Lamalle, who professes to have derived it from Job-a-Meecken, a well known Dutch surgeon of the 17th century. By this it will be seen that the practice of incisions is not new, but that it was in use at least two centuries ago.

That the inflammation was violent in its character, and rapid in its progress, will appear from all the cases I have referred to. In the case of Lemire, not more than thirteen or fourteen hours after the attack, albumen was largely deposited in the substance of the tongue, and had I not promptly resorted to the use of the knife, the probability is, that in a few hours more the deposit would have been purulent. In Martin's case, the incisions were made about 24 hours after the attack, and the deposit was pus. It will be remarked that the secretion differed in its character in all these cases. In Lemire's the deposit had not yet become purulent, and in Miss M.'s (which was opened three weeks after the first attack) the probability is, that absorption had taken place in some slight degree, which supposition would account for the peculiar character of the deposit, and for the irritative fever under which she laboured.

It will also be remarked, that in each of the reported cases referred to

* In using the word cavity it may be supposed that there was a distinct cavity or cyst in the substance of the tongue: such, however, was not the case, the matter being contained in the cellular substance.

above, several incisions were made, and that I made only one. My reason for so doing was, that in Martin's case, it is stated, that, "I made other two incisions, one in the middle and the other in the left side of the tongue, but no purulent matter followed." Wherefore, I concluded, that there was only one continuous cavity, and that a repetition of the incision would only be attended with useless pain.

It has occurred to me that the disease might be confined to one side of the tongue only, as in both my cases I made my incision in the most elevated part and apparent centre of the tongue, and yet, on the subsidence of swelling, the incision proved to have been on one side. In all cases I have met with, the swelling appears to have been of the right side! Can physiology in any satisfactory manner account for this?

The practice of incisions in swelling of the tongue is neither new nor unfrequent; but the comparative rarity of the disease usually takes the surgeon so completely by surprise, that much time is lost and much suffering entailed upon the patient by delaying its use. I believe it to be the only course that will afford *immediate and permanent* relief.

I will close this lengthy article with an extract from Martin's case, which is so pertinent, that I prefer endorsing it to writing anew my own views. He says, "It is hardly necessary to remind the reader, that to effect any real good, the incisions should be made deep and extensive, otherwise he is only torturing his patient with pain—*likely to prove more injurious than beneficial*.* The operation is exceedingly simple, and is not attended with the smallest danger, so that the surgeon *may safely act with boldness and promptitude*. Indeed, such is the urgency of the case, that it imperatively demands vigorous interference; and *trifling remedies are only dangerous instruments* in the hands of a surgeon. In the case above related, it is questionable if the man could have survived for any length of time, unless the enlargement had been subdued by the timely use of the knife; for the *pus was so deeply seated* that he might have been suffocated before it could make its way outwards."

I will only add, that this latter termination is one *we may look for in vain*, as in Miss M.'s case, there was no such attempt, at the end of three whole weeks.—*British American Journal*.

QUEBEC, Sept. 13, 1848.

Glossitis. By GEORGE GRIFFIN, Esq. Surgeon, Half-Pay 85th Regiment, Quebec.—Within the last two or three days, I have seen in the Medical Journal under your superintendence, the very interesting case of Miss M. as furnished by Dr. Marsden. I am of opinion that it is, in some sort, the duty of every medical man, to lend what aid he can in the investigation of rare and dangerous diseases, more especially, and to specify what experience may have taught him. Therefore, in furtherance of that conviction, I am induced to consider that perhaps this communication may not be uninteresting to your readers.

It has been my fortune to see but two of these cases during a service of upwards of thirty-five years, and they are well impressed upon my mind. The first was in the person of a Neapolitan sailor, while I was on detach-

* The italics are my own, and intended to impress these points upon the reader.

ment in one of the Ionian Islands, in the summer of 1822. The man was landed from a gun-boat, without any history of his state, further than that he complained, for the first time, about twenty-four hours previously to the vessel making the island.

I found the tongue enormously enlarged, protruding from between the teeth; breathing hurried, anxious, difficult, performed altogether through the nostrils; suffocation impending; face livid; eyes protruding; moaned incessantly, and very restless. The accompanying fever purely inflammatory; heat of the skin intense; a powerful pulse, and strong action of the carotid and temporal vessels; he was sensible; could not articulate, but expressed his distress by signs. Blood was taken from the arm without delay, in no stinted degree; the bowels freely opened by active medicines; but there was scarcely time to carry these remedial measures into effect, before it became abundantly evident, that, unless relieved, the man must die, and that shortly. I had no one to advise with, and had never seen or heard of the disease before, however, there was no alternative, and the mode of relief evident; having secured the head from moving, I depressed, the lower jaw and tongue, with a strong iron spoon, as much as practicable, and then introduced a scalpel sideways or flat, as far back as I could, and made two incisions into the dorsum of the tongue, from behind forwards to the apex, one on each side.

The hæmorrhage was very profuse, but the relief immediate; no purulent matter followed the incision. So rapid was the declension of the swelling, that the next day the place of the incisions could scarcely be detected; those who have witnessed lacerated wounds of the tongue, must have remarked this circumstance. A week or two afterwards, I had a second case under my care, also a foreign sailor. Now aware of the nature of the disease and its danger, I no longer hesitated, but made the incision at once; both these men did well. The after treatment was small doses of some mercurial preparation to affect the mouth. I am writing of occurrences twenty-six years ago—I do not know that I should have resource to mercury now; the result, however, was quick recovery.

The father of the young lady whose case is related by Dr. M——, has been well known to me for several years—his daughter from childhood. Some time in August last, we met accidentally, and he narrated to me his daughter's perilous state, and the circumstances attending it. I went to see her the following day, and she expressed to me the immediate relief she had experienced from "the incision," and her distressed state previously. She was, as might have been expected, in a state of great debility, but recovering. The tongue was, though large, generally soft, and of a dull leaden color. As well remarked by Dr. Marsden, "The disease is so rare, that it usually takes the surgeon quite by surprise."—*I bid*.

ESPLANADE, QUEBEC, Nov. 20, 1848.

Epidemic Cholera at New Orleans. By E. D. FENNER, M. D.—The following history of the late epidemic visitation of cholera at New Orleans, was written for publication in the New Orleans Med. and Surg. Journal, of which Dr. Fenner was formerly one of the Editors. Not being prepared,

however, in season for that Journal, Dr. F. consented to its insertion in the New Orleans Picayune, a copy of which he has kindly forwarded to us. We have perused the letter with much interest, feeling assured from our personal knowledge of the author, that a report could not emanate from one more capable and responsible. We commend the article to our readers, to all of whom, we doubt not, it will be, at the present time, most acceptable.

EDITOR BUFF. MED. JOURNAL.

To the Editor of the New Orleans Medical and Surgical Journal.

DEAR SIR:—According to your request, I shall offer you some brief memoranda of the epidemic cholera which has recently scourged our city. We have passed through a long-dreaded and most dangerous crisis; and now that "the action" is over, and the dust and smoke of the "battle field" (if you will allow the metaphor) are cleared away, it is both meet and proper for us to review the scene, take account of the "killed and wounded," and endeavor to learn from the result some lesson of wisdom and usefulness. Nor do I deem my *military* metaphor altogether inappropriate to the present time. True, our city is shrouded in mourning and sadness, yet many have escaped the peril of death; and, as we have recently commemorated our almost miraculous deliverance from the arms of the invader in days of yore, let us not be unmindful or ungrateful for our recent deliverance from an impending danger scarcely less terrific. We have encountered an *unseen and a dreadful foe*—one whose progress was marked by the victims strewn along his course. Yet even his ravages were not un-mixed with mercy. Here and there a victim was overwhelmed, as by an avalanche, and there was no help for him; but for the most part, fair and timely warning was given, and those who attended to the dictates of wisdom and prudence, found but little difficulty in escaping the impending danger. Amidst the general alarm and distress that pervaded the community, the duties and responsibilities which devolved upon the respectable portion of the medical profession were of the most serious and important nature: they were met and performed with a firmness and fidelity worthy of a passing notice. Without regarding the unjust and illiberal imputations that were cast upon the profession, it is not to be denied that the physicians of New Orleans have boldly stood their ground, shared the common danger, and done all in their power, as well to instruct their fellow-citizens how to keep well, as to rescue them when ill. What better evidence need I adduce to substantiate this assertion, than the fact that although nearly everybody felt more or less the epidemic influence, there were comparatively but few bad cases and very few deaths amongst the better classes of people—such as usually apply to respectable and educated physicians for medical aid? The reason is obvious: these people applied for medical aid in good season—they obtained the best advice and remedies, and were promptly cured; whilst others were either deluded into false security, by relying upon some worthless but well-puffed nostrum, or through ignorance and temerity neglected all remedies until the disease had advanced beyond the curable stage. This was the penalty of ignorance and folly—and a severe one, too. Without farther preliminaries, let us note some of the more prominent facts connected with the rise, progress and results of the epidemic.

The commencement of the late epidemic may be dated from the 11th of December, when the ship "Swanton" arrived at this port, thirty-nine days from Havre, with 280 steerage passengers, consisting of German and French immigrants—chiefly German. Now, whether it be a mere coincidence that epidemic cholera broke out in this city just at the time when a vessel arrived having some cases of cholera on board, or that said vessel brought the infection, which rapidly spread through the whole community, is an exceedingly debatable question. But let me go on with a statement of such facts and circumstances as I have, before I attempt to debate it. The whole subject is replete with interest. Everything connected with it is new to me, and I will endeavor to make the most rational induction in my power, having no preconceived theory to substantiate.

For several weeks previous to the arrival of the "Swanton," the weather had been changeable—for the most part very warm, though there had been several white frosts. Yellow fever had almost disappeared, and there was but little sickness prevailing; though amongst the existing diseases were observed some remarkable cases of stomach and bowel complaints. On the 5th of December I attended a gentleman on Custom-house street, who labored under vomiting, pain and spasms in the bowels, and prostration to such a degree that, if epidemic cholera had been supposed to be here, no person would have hesitated to pronounce him a case. He had no rice water evacuations, but his bowels were rather costive, and he vomited bile; but many such cases have been seen since the epidemic was declared. He recovered after two or three days' illness, and has not been again sick.

Some days previous to this, three or four negroes were attacked with cholera morbus on the same night and at the same house, in Gravier street. They were promptly treated, and all soon recovered. Similar cases were observed in the practice of a number of physicians in different parts of the city, all going to show, as it appears to me, that the epidemic influence of cholera was gradually being matured and developed in our midst.

I have recently learned some other facts, which are worthy of notice in connection with the commencement of this epidemic. The ship "Guttemburg," from Hamburg, with some 250 steerage passengers, after a passage of fifty-five days, arrived at New Orleans on the 6th of December. Cholera was prevailing at Hamburg when this ship left, and six or seven deaths from it occurred on board before she got out of the Elbe. As soon as the vessel got out to sea, the disease subsided completely, and no more cases occurred during the whole voyage. As there were no cases of cholera on board when she arrived here, it attracted no attention, although she came from an infected port; but I am informed by one of the visiting physicians of the Charity Hospital, that soon after the epidemic broke out here, a man died in one of his wards, who stated that he had recently arrived from Germany, on board a vessel which had lost several passengers by cholera. What became of the other passengers of the "Guttemburg" I know not.

In addition to this I should not omit the following fact, obtained from the records of the Mayor's office and the newspapers of the day, viz: The bark "Callao," from Bremen, having 152 German emigrants on board, after a passage of forty-eight days, arrived at New Orleans on the 8th of December, was anchored off Slaughter House Point, on the opposite side of the river. The Secretary of the Board of Health was sent to examine her on the 11th of December, and reported that: "During the voyage eighteen

of the immigrants died, some of whom died with *purging and vomiting*, and others with violent attacks of diarrhoea. The last death occurred on the 30th of November. At present no cases of sickness on board, and those who left the vessel since its arrival are well. N. B.—It is reported in the log-book that the first case that died perished from cholera. This is merely the opinion of those on board, and is not entitled to much weight."

The Callao remained over on the opposite side of the river until about the fourth of January, when she was brought over on this side to be loaded.

The ship Swanton left Havre on the 2d or 3d of November. *There was no cholera at Havre when she left*, nor have we heard of any there since. There was none in any part of France; but the epidemic had reached Germany, and some of the passengers on board the Swanton were German emigrants. Whether they came from an infected district or not, we are not informed. The vessel was out twenty-six days before a death occurred, the first being from consumption on the 28th November. We learn that sixteen or seventeen deaths occurred during the passage, most of them from bowel complaints, supposed to be dysentery. The Swanton reached New Orleans on the 11th of December, and took position at the wharf in the *upper part of the Second Municipality*. On the morning of the 12th a woman was carried from the ship to the Charity Hospital, and found to be in a complete state of collapse. She was reported to have been attacked the night previous with violent vomiting, purging and cramps.

The intelligent house surgeon, Dr. Wedderstrandt, as well as a number of other physicians who saw this case, at once recognised it as Asiatic cholera, and the Board of Health was notified of the fact. The woman died at 6 P. M. The Secretary of the Board, Dr. Hester, was immediately despatched for the purpose of examining the condition of the vessel and passengers. He reported the facts above stated, and in addition, that "he found two old women laboring under bowel complaints, and two children suffering from debility—the ship in a good condition as regards cleanliness—passengers generally look well."

On the morning of the 13th, a man who came over on the same vessel, was brought to the Charity Hospital, and found to be in a complete state of collapse. He was cold and pulseless, but his intellect was perfectly clear, and he gave the following account of himself: He said he had a slight diarrhoea on the morning of the 11th, but he walked about the city and ate an apple. On the 12th he left the ship and went to a boarding-house near the Poydras Market—still had slight diarrhoea, but ate no fruit this day. After going to bed, was attacked with severe vomiting, purging and cramps—took no medicine, and was reduced to a state of collapse and entered the hospital. He died about 6 P. M. The books of the hospital show three other cases of cholera admitted on this day, all of which terminated fatally. They were from different parts of the city, and not passengers of the Swanton. On the same day I observed two women in the hospital from the same ship. They had only slight diarrhoea and were promptly relieved. The two fatal cases were seen by a number of physicians, most of whom felt no hesitation in pronouncing them Asiatic Cholera, though a different opinion was expressed by some. The rumor soon spread throughout the city and created great consternation.

On the evening of the same day (13th December) that the second case was taken to the Charity Hospital, a man who has resided here for many

years, and who does business not far from the St. Charles Hotel, came into my office with strong symptoms of cholera. He had not been near the ship Swanton, nor seen any of the passengers. I prescribed for him, and on visiting him at his room, half an hour afterwards, I found him extremely ill, with severe pain in his bowels, copious watery purging, skin bathed in cold sweat, great thirst and general prostration. His condition was so alarming, and he derived so little relief from large and repeated doses of opium, calomel, camphor and capsicum, assisted by sinapisms, stimulating frictions, &c., that I determined to resort to the inhalation of chloroform. By this means he was made perfectly easy in about two minutes, and remained so until the other medicines he had taken had time to act. He got through the night pretty well, and recovered in a few days from a dangerous illness.

On the 14th December the Board of Health held a special meeting, and issued a card which appeared in the newspapers the following morning, assuring the public that there was no foundation for the rumor that the Asiatic cholera had made its appearance in the city. This statement was seconded by flourishing editorials in several of the newspapers of the day.

On the 15th December there were eight cases of cholera admitted into the Charity Hospital, and I heard of cases in the private practice of a number of physicians.

In a letter from a learned physician of this city to a distinguished professor in Paris, which was published in the Commercial Times of the 23d inst., the author mentions three fatal cases of cholera that occurred on Custom-house, Bienville and Chartres streets on the 15th. He goes on to say: "It is well enough to remark here, that these three primary victims of cholera in New Orleans were all cooks, going every morning, very early, to the principal market in the city, situated on the bank of the river, a cable's length from the infected vessel." In the latter part of this statement, the worthy author must have made a mistake, for the President of the Board of Health was informed by its Secretary, who was sent to examine the Swanton, that he found her in the upper end of the Second Municipality, which is nearly a mile from the aforesaid principal market, frequented by the unfortunate cooks. So these cases must have originated in a different way.

On the 16th December there were eleven cases of cholera admitted into the hospital, and the disease was evidently rapidly increasing in private practice.

On this day I was called to see Dr. J. B. Morgan, of Jackson, Miss., who was attacked the night previous, without having committed any other indiscretion than eating some fish and oysters at dinner. When I arrived at his room, I met Dr. Farrell, who had seen him before, and had good reason to be provoked at the difficulty he found in convincing Dr. Morgan of the danger he was in, and the importance of prompt and vigorous treatment. Dr. M. had already passed about thirty liquid evacuations, then had cramps in his legs, and in fact was on the verge of collapse. Dr. M. being an old friend and neighbor of mine, I joined my entreaties to the arguments of Dr. F., and we did all we could to convince him of the importance of vigorous treatment, but all to no purpose. He insisted that he was not dangerously ill—that he had been similarly affected many a time before, and that if he were not disturbed he would soon be well. The sequel verified our worst

apprehensions. He was incorrigibly obstinate, dallied too long with a dangerous disease, and was lost.

The panic now prevailed throughout the city, and vast numbers of people fled in every direction; yet some of the leading newspapers, and a few physicians, hooted at the idea that the disease was *Asiatic Cholera*, and the Board of Health still kept aloof. From this time the disease increased so rapidly that on the 22d December, ten days from the time when the first case was admitted into the hospital, the number of deaths by cholera in that institution amounted to twenty-two, and in the whole city to forty-five. But let me not encroach upon your province, Mr. Editor. Being Secretary to the Board of Health, you will of course supply your journal with all the mortuary statistics that may be interesting to the profession. I may be permitted to state in this connection, however, that the Board of Health published on the morning of the 23d December that Asiatic cholera was "epidemic" in the city, the number of deaths from it the day previous having been forty-five; and they announced the cessation of the epidemic on the 6th of January, when the deaths amounted to thirty-eight.

The epidemic raged most severely from the 22d to the 30th of December, having reached its zenith about the 28th, on which day the deaths by cholera were ninety-two. From the 16th to the 22d the weather was oppressively warm, the thermometer rising as high as 84°. From the 22d it was cool, wet, and gloomy, till the night of the 30th, when there fell a white frost. On the morning of the 1st January there was another white frost, and from that time the disease declined steadily.

The epidemic influence appeared to be felt by almost every person in the city, whether native or foreigner, acclimated or unacclimated. Thousands complained of an extraordinary uneasiness in the stomach and bowels, but in a vast majority of instances it was easily relieved, and but few bad cases occurred amongst those who were prudent, and paid proper attention to the premonitory symptoms. The lower classes of people have evidently suffered most, which may be attributed to ignorance or neglect. The mortality at the Charity Hospital has been very great; yet no one can be surprised at it who visited the institution during the epidemic, and witnessed the condition in which the patients were when admitted. Cholera is an insidious disease that generally steals upon its victims, seldom declaring itself openly until it has them completely within its fatal grasp. I have not a doubt that seven-tenths of the people who have recently perished of it in this city might have been saved, if they had procured proper medical aid at the onset of the disease. I presume there is hardly a physician in the city who has not been called to persons reduced to the most dangerous condition by relying too implicitly and too long upon some of the various "specifics" advertised in our newspapers, and lauded by the editors. Yet some may have been saved by these very nostrums; for there are many in this goodly Commonwealth who have such an antipathy to physic, that they will not take it under any circumstances, unless they see its assumed virtues blazoned before the public by the effulgent illumination of fictitious puffs and certificates. They have a decided *penchant* for the marvellous, the mysterious, and the unknown. They scorn reason and common sense, and have contempt for honest simplicity in scientific researches. Like the followers of the veiled prophet of Khorassan, they

"Would be dupes and victims—and they are."

But let me not weary your patience with matters of this sort. The people are free agents, and have the right to take what medicine they like. If they prefer artful humbuggery to honest, unpretending science, why let them have it to their heart's content.

The mortality from Cholera at its late visitation, compares most favorably with that of 1832, when it first scourged our city. The number of deaths by cholera from the 12th December, 1848, to the 20th Jan., 1849, as appears from the reports of the Board of Health, amounts to near 1400, 596 of which occurred at the Charity hospital. We learn from an interesting Memoir on the Cholera of 1832, addressed to the Academy of Medicine of Paris, by Dr. M. Halphen, a French practitioner of this city at that time, that the disease made its appearance about the 25th of October, in the midst of an epidemic of yellow fever; that in a few days it raged severely, and that in the short space of twenty days it killed about 6000 people. Dr. Halphen says, that the mortality amounted on some days as high as 500 a day. He estimates the full population of the city then at 50,000, and as cholera broke out during the prevalence of yellow fever, ere yet the absent citizens had returned, and before the customary visitors dared to come in, he does not think the population at that time exceeded 35,000; thus showing the frightful loss of about *one-sixth of the people in about twenty days*. When we read over these sad details, we may well congratulate ourselves upon our happy deliverance from the late pestilence. True, we have lost about 1400 people, amongst them a few valuable citizens; but what would have been our fate if so malignant a disease as that of 1832 had broken out in December last, when all our own people were at home, and the city was full of strangers? In 1832 *the living could not afford decent burial to the dead*. Dr. Halphen states, that on some days upwards of one hundred corpses were accumulated at the cemeteries, waiting for interment. Large trenches were dug, into which cart-loads of uncoffined bodies were heaped indiscriminately; and in the dead of night, a great number of bodies, with bricks and stones tied to the feet, were stealthily thrown into the river. The same ratio of mortality at the present time would demand about twenty thousand victims. Let us turn from the appalling calculation, and thank God that we have been so mercifully spared.

As in 1832, the epidemic has declined to a stage of comparative security, but the disease has not entirely disappeared. There is as little cholera in New Orleans at the present time, in proportion to the population, as in any other part of the Lower Mississippi Valley. Whether the epidemic will be rekindled, at the approach of the ensuing summer, remains to be seen. If the miserable condition of the city, as regards cleanliness, will have any influence upon the event, we may certainly expect it. New Orleans must ever continue to be a prey to the most fatal diseases that prevail, until something efficient is done to improve its sanatory condition.

The manner in which the Cholera has spread from this city, in every direction, forms a problem as curious and difficult as that of its first appearance. Almost every vessel that left the city, a few days after the disease commenced, soon had cases aboard, and on some of the steamboats going up the river there were twenty or thirty cases and many deaths. Thus, persons having the disease, and dying of it, were carried to all the landing towns and cities up the river as high as Cincinnati. In many of these places it spread to a limited extent among the inhabitants; in others it did

not. We have as yet heard of no place up the river where the disease has prevailed as an *epidemic*. We learn that cholera is spreading among the plantations along the river, and also in the interior of Louisiana. To some of these the infection appeared to be directly carried; at others it began without any communication with an infected district. The most remarkable mortality that we have heard of, out of the city of New Orleans, occurred in the 8th Infantry, a body of 450 soldiers which arrived here from Jefferson Barracks on the 1st of December, and were stationed at the Barracks, about four miles below New Orleans. There they remained till the 12th, when they embarked for Port Lavaca, in Texas, on board the steamships Telegraph and New Orleans. These ships reached Port Lavaca on the 15th, but the men did not land till the 20th December. On the night of the 21st, according to a correspondent of one of our newspapers, the right wing of the regiment, under the command of Brevet Major Gates, moved twelve miles into the country, the left wing, under command of Major Morrison, remaining in Lavaca. During the night the weather changed from sultry heat to a cold, rainy norther, and by daylight four soldiers of those left in the town were dead with cholera, and many laboring under the disease. On the following day an express came back from Major Gates, with the intelligence that his men were falling rapidly with the same disease. The disease raged with such severity that in the brief space of three or four days 115 men, or about one fourth of the command perished. Yet, strange as it may appear, the correspondent informs us that "no cases occurred among the citizens." Now these soldiers must have imbibed the morbid cause somewhere, which lay dormant in their systems, like a powerful enemy in ambush, until a fit opportunity was offered for action by the sudden and malign influence of a Texan norther. Then it sprang upon its unsuspecting victims, made dreadful havoc, and in a few days vanished.

We are informed that cholera has prevailed to a considerable extent at Houston, Texas, whilst Galveston, on the sea board, has escaped, although situated on the line of travel from New Orleans to Houston.

Soon after the epidemic commenced in this city, a trader on Esplanade street took his negroes (about sixty in number) across the lake and located them in the pine woods, where he hoped they would be perfectly secure. They were all well when they left the city, excepting one case, which terminated fatally on the day of their arrival over there, and continued well for nearly three weeks after reaching their point of destination. The cholera then broke out among them and killed a considerable number in a very short time.

At the Charity Hospital, probably as many as fifty cases have occurred among the nurses, servants and persons who had been admitted for other complaints.

After reviewing the few recent facts which I have just stated, what shall we say about the contagiousness or transportability of cholera? Numberless striking facts recorded in the history of cholera would seem to prove beyond cavil that it may be transported from place to place, through the medium of persons affected. On the other hand, the numerous instances in which the disease failed to be propagated through this medium, and the utter futility of rigid quarantine regulations and sanatory cordons in arresting its march, would seem to authorize a different opinion. Amidst these contending difficulties, if the reader can arrive at a satisfactory conclusion,

I can only say he is more fortunate than myself. Speaking of quarantine, perhaps we may hear before long that the city of Natchez, on the river above us, has been protected from cholera by *her* quarantine. I have been informed that there were some fatal cases of cholera in that place. Moreover, I have good authority for saying that the quarantine regulations of Natchez are altogether worthless, except to the officers charged with their enforcement.

I ought not to close this communication without saying something about the general character of the disease, and the treatment pursued by the physicians of New Orleans. As to the character of the epidemic, I think I may safely say that it has not been very malignant. In most instances the attack was insidious and mild—generally commencing with a looseness of the bowels, attended with more or less griping, and often accompanied by nausea and vomiting. The latter symptoms almost invariably attended those patients who had committed imprudence in eating. Without descending into minutiae, I may say that the disease almost invariably commenced with some unusual disturbance of the digestive organs. When this disturbance commanded the attention it deserved, it was generally most easily remedied by the simplest means; but if neglected, it seldom failed to lead on to the most disastrous consequences. This, then, is the *curable stage* of cholera, and almost the only stage in which it can be cured; for if it be permitted to run on till the patient becomes cold and pulseless, ninety-nine in a hundred will inevitably die. By powerful means, reaction may often be established; but the danger is not yet passed—a great majority still die of the consecutive fever. Say what you will about creating *panic* and spreading alarm amongst the people, I feel no hesitation in asserting that when epidemic cholera is prevailing, every person who has any unusual diarrhoea, had better believe he is *a case* and act accordingly. If this simple rule was universally adopted, cholera would soon be rendered comparatively harmless. Thus, according to Dr. Watson, one of the ablest English authors, the disease was arrested in London by the establishment of "*Diarrhoea Dispensaries*," where the poor were supplied gratuitously with proper remedies. Thousands applied, who would otherwise have waited to *get ill* before going to a hospital to be treated. Who can deny that it would be well to *frighten* the people, if need be, into this degree of precaution? Without it you may rest assured there is no safety.

I deem it unnecessary to enter into a minute detail of the symptoms that characterize cholera, as they are familiar to most persons, whether belonging to the medical profession or not. It may not be amiss, however, to mention a few of the most remarkable ones that attended the late epidemic. Many bad cases were marked by an obstinate vomiting of bile, which continued until death. The vomiting would continue for days, and incredible quantities would be thrown up. In these cases the diarrhoea was generally moderate and sometimes absent. The worst cases were those in which the rice-water discharges were profuse, as well from the stomach as the bowels. In these, there was no appearance of bile whatever.

A few cases were seen at the Charity Hospital which terminated in black vomit.

When collapse supervened early in the attack, before the system was too much exhausted by copious rice-water evacuations, it was less difficult to bring about reaction, and there was better hope of ultimate success. So

far as I know, the only cases of recovery that took place after decided collapse were of this kind.

Where reaction from a state of collapse was slow and difficult, a sort of typhus fever supervened, which lasted for some days, and generally terminated fatally with affection of the brain. The intellect was generally clear and undisturbed to the last, excepting in those who died of the consecutive fever. It is marvellous and astounding to witness the mental clearness and composure of some persons dying with cholera! Whilst the attendant relatives and friends are agonized with grief at the sudden and awful calamity, the poor victim is often seen supernaturally calm and uttering words of consolation with the expiring breath.

The treatment of cholera admits of much variation. Educated physicians everywhere concur in the indications to be fulfilled, or what is wanted to be done; but amidst the multiplicity of remedies at their command, of course each one resorts to such as he thinks are best adapted to the circumstances of the case. Doubtless the same object may be accomplished by a variety of means, if it can be accomplished at all; and in our choice of remedies we must be guided by observation and experience. In the treatment of what are called the premonitory symptoms, the first indication is—to check the diarrhoea as soon as possible, keeping an eye, at the same time, to the important secretions of the liver, kidneys and skin. For this purpose, physicians very generally resort to opium and its preparations, combined with stimulants and aromatics—or opium with some mercurial, or with quinine. According to the urgency of the symptoms a good prescription may be made of laudanum or parégorick and brandy—or laudanum, spirits of camphor and tincture of assafoetida—or laudanum, essence of peppermint and compound spirits of lavender—or calomel, opium and capsicum or camphor—or equal parts of parégorick and tincture of catechu. The following is a recipe which I found to answer very well, viz: *R. Sulph. Quinin. ʒi, Tinct. Opii, ʒiiss, Tinct. Capsici Comp., ʒiii, Mucilag. Acacia with Aqua Cinnamon, f ʒiv., M.* Give a table spoonfull and repeat after every two loose stools. Although opium is so often found in the prescriptions above, I should mention that some physicians disapprove of it and seldom prescribe it in cholera, except by enema. These gentlemen place their chief reliance upon calomel, combined with camphor, capsicum and the like. As to the sulphate of quinine, it appears to be serviceable in almost every kind of disease that occurs in this region. It possesses remarkable intrinsic virtues, and may be used as an adjuvant to many other remedies.

In the treatment of the violent or acute stage of cholera, when there is vomiting, purging and cramps, we resort to anodynes, antispasmodics, stimulants, calomel, &c., internally, aided by sinapisms, stimulating frictions, &c., externally.

The treatment of the stage of *collapse* is altogether desperate. As before stated, a vast majority of patients die after getting into this condition; and it is no wonder, for the system is then completely drained of its vital fluid. An excessive hemorrhage from a divided artery would not produce a greater prostration than is brought about by the copious serous evacuations of cholera; for all the fluid discharged is abstracted from the blood. Various remedies are used in this stage, such as sinapisms, blisters, the hot and the cold bath, the hot air bath, calomel, carbonate of ammonia, &c., &c.

The most remarkable recovery from collapse that I witnessed was effected by very large doses of calomel, washed down with tablespoon doses of laudanum, aided by sinapisms and frictions with spirits of turpentine and sweet oil. This was a lady who was rescued from the very jaws of death. She was afterwards pretty badly salivated, but recovered without serious injury.

Two other physicians attended her with me. In the case of Dr. Morgan, mentioned before, I witnessed the astonishing power of cold water in bringing about reaction from a hopeless state of collapse. Warmth was restored, the pulse returned at the wrist, and life was prolonged two or three days; but still it failed, for the injury sustained was irreparable. The cold bath was administered in this instance at the suggestion of my friends, Dr. Richardson, of Vicksburg, and Dr. Gustine, late of Natchez, who said they had derived great benefit from it in the cholera of 1832. Being favorably impressed with the power which the remedy displayed in the case of Dr. M., I resorted to it in two other cases of collapse in private practice. It produced reaction, but they both died for want of vital power to sustain it.

I must apologise for the length to which this communication has unexpectedly been drawn. I have not gone into the minutiae of the theory and practice, or the pathology of cholera. It is to be hoped that our medical journal will be enriched by some valuable papers on these subjects, especially the pathology of the disease, which has been laboriously investigated by some of our most respectable physicians.

Before closing, I will offer a remark or two on the course to be pursued by persons exposed to the epidemic influence of cholera:

1. Let them avoid imprudent excesses of all kinds.
2. Let them not make too sudden and great a change in their established habits.
3. Most persons should avoid fish and oysters; also, acid fruits and vegetables, with the exception of rice, potatoes, and beans.
4. When feeling weak and slightly indisposed, let them take a little good brandy or wine.
5. Let them pay prompt attention to the first and slightest premonitory symptoms. Their family physician, or some respectable regular physician will give them the best advice they can obtain, as it is their interest as well as their duty to preserve the lives of their employers.
6. When some simple remedy does not quickly arrest the disease, they should send for their physician; they will be apt to do this sooner or later, and it is but right that he should have a fair chance to save them, as his reputation is involved in the result.

By attending to these simple directions, many may escape the impending danger; whilst, by neglecting them, thousands will fall into untimely graves.

Very respectfully,

NEW ORLEANS, Jan., 1849.

E. D. FENNER.

Death from Chloroform.—A coroner's inquest was held in New York, on the 20th of January, on the body of a seaman, thirty-one years of age, who came to his death the previous day by the effects of chloroform, while undergoing an operation in the New York Hospital.

Dr. Buck, the attending surgeon, in his evidence, stated that, "on or

about the 26th of December, I advised that chloroform should be administered to the deceased for the purpose of examining the condition of the rectum, the parts being in such a state of excessive irritability as scarcely to admit of a separation of the nates. The patient recovered from the effects of the chloroform, and remained in all respects in the same condition as before its use. On the 19th of January, the deceased being in a sound condition, except the local ailments spoken of, and he having never complained of either his head or chest, and not having suffered from the first administration of chloroform, I directed it to be administered to him for the purpose of performing an operation upon the rectum, and the operation of circumcision to remove a phymosis caused by the chancres: the patient soon became excited by the chloroform, as is usually the case, but not beyond a degree which I have often observed. At this moment my attention was arrested by my assistant calling for a wet cloth. On examining the patient I found his face and neck of a livid leaden hue or color, the eyes tumid, the pulse imperceptible at the wrist, and the whole body relaxed; after two or three gasps he ceased to breathe; every means were promptly used to restore the deceased, but without effect. The chloroform was obtained at Lent's, 91 John Street, and not exceeding three drachms was administered from a napkin; a portion of chloroform from the same vial had been administered the day before, to a patient without any unfavorable effects: about ten minutes elapsed from the commencement of its administration before death took place. On making a post-mortem examination twenty-four hours after death, I found the face less livid than before death; on examining the head, the brain and its membranes presented no other appearance than are seen in persons dying when in full health; the lungs were a good deal congested; and discharged, when cut, a large quantity of bloody serum; the heart was large, its ventricles and auricles were empty; its condition flabby; the substance of the left ventricle rather softer than natural; about half an ounce of a watery fluid was found in the pericardium; the viscera of the abdomen were healthy.—*Western Journal of Medicine and Surgery.*

Idiopathic Tetanus in a Horse, successfully treated by Chloroform. By T. L. MADDIN, Student of Medicine in the University of Louisville.

In August last I tried the effects of chloroform upon a horse affected with Lock-jaw, and also violent convulsions of the entire muscular system. The circumstances of the case were these:—A farmer, residing in North Alabama, at whose house I was living, discovered, early in the morning, that one of his horses was very singularly affected, and, upon examination, found that he had tetanus, or lock-jaw; and after a short time tetanic convulsions of the entire body supervened—which continued to grow more violent during the day.

Having been absent from home all day, when I arrived at his house late in the evening, my landlord remarked that he had a horse dying, and also mentioned his symptoms.

The opportunity, I conceived, was an excellent one to test the efficacy of chloroform, and immediately I suggested the trial of the remedy. The

owner of the horse remarked that he did not appear as if he could live longer than ten minutes, but that I was at liberty to do as I pleased.

The horse was down, and could not raise his head; his limbs were in an extreme state of rigidity, and his jaws firmly clenched. I first gave him half an ounce of laudanum, with twenty-five grains of camphor dissolved in it. This did not make any impression upon the symptoms whatever. I then caused him to breathe chloroform, and in less than two minutes he was fully under the influence of it. He remained thus for fifteen minutes; during which time his limbs were quite flexible; his muscular system generally relaxed; and his jaws could be opened about two inches. At the expiration of this time, there were symptoms of a return of the convulsions. I brought him rapidly under the influence of the chloroform again, and thus warded them off. It was now twenty minutes before the anæsthesia passed off, and it was then found that he was able to get up and walk about. In less than three hours from this time he was grazing about the lot, and next morning appeared perfectly well.

I have believed that an account of this case would be acceptable to the profession, notwithstanding that the subject of it was a horse, for it shows very conclusively the perfect control which this potent agent possesses over tetanus, and convulsive diseases generally, which are among the most intractable that the medical man has to combat.—*Western Journal of Medicine and Surgery.*

Case of Dysentery Treated by Injections of Nitrate of Silver.—A female, 45 years old, was brought to the Hopital Necker, suffering from dysentery of five days' duration. The symptoms had been much ameliorated by the use of opium and other remedies, but the evacuations were still seven or eight in the day, consisting chiefly of bloody mucus, and accompanied by severe pain.

The following injection was ordered:—Crystallized nitrate of silver, 25 grammes; distilled water, 200 grammes; to be used in the following manner:—After each injection of the solution, another injection of about 300 grammes of tepid water immediately to be given, in order that the nitrate may be conveyed high up into the intestine, and come in contact with a larger extent of surface.

The next day the amelioration was remarkable. There had been three stools which contained much less of the bloody mucus. There was considerable tenesmus. After four days' treatment, the stools became perfectly normal. They contained more mucus, but little tinged with blood. There was only one stool daily, which was not attended with pain. During convalescence, and in consequence of some error of diet, the diarrhœa occasionally returned, the stools being tinged with blood, but without any appearance of mucus; it was, however, always immediately controlled by the injection of the nitrate of silver, followed the next day by a simple injection of starch; and the patient eventually quitted the hospital quite well.

This case not only shows the efficacy of nitrate of silver enemata, but also how they may be used with perfect safety; which fact, for a considerable period, had been denied. A strong solution of the salt has been injected into the rectum and colon, without producing the least accident, either

immediately or consecutively. It acts upon the mucous membrane of the parts as it acts upon the lining membrane of the urethra, or the conjunctiva, or upon any other mucus lining to which it is applied.—*Medical Times*.

Effects of the New Drug Law.—Dr. Edwards, the indefatigable chairman of the Special Committee in Congress, which reported the new law, was employed for some time before the commencement of the present session, by Mr. Secretary Walker, to visit the ports of New York, Philadelphia, Baltimore and Boston, and report upon the operation of the law. Through the kindness of Dr. Boerstler, of Lancaster, we have been favored with a few items from Dr. Edwards' forthcoming report. We are sure we could not lay more highly interesting and satisfactory information before our readers, than is contained in the following extracts from Dr. Boerstler's letter to us.

"Much good has already resulted from the law, and the opposition to it is now confined to Drug brokers, the regular dealers approbating it. The partner of the largest importing house in New York, now in Europe, writes that this law will effectually prevent the shipment of adulterated drugs and chemicals. The inspectors of our ports are doing their duty faithfully and fearlessly—instance New York alone, where the following spurious articles were not allowed to enter, but sent back. The inspector rejected:

July 19,	6,650	lbs.	spurious rhubarb root, from Canton.	
" 21,	931	"	" " " " " "	
Aug. 10,	750	"	adulterated opium,	Marseilles.
" 11,	2,940	"	jalap root, spurious,	Tampico.
" 31,	2,259	"	rhubarb root, spurious,	London.
Sep. 1,	645	"	" " " " " "	
" 5,	1,414	"	gamboge,	"
" 8,	545	"	rhubarb root,	Hamburg.
" 9,	1,400	"	senna,	Leghorn.
" 19,	2,930	"	yellow bark, spurious,	Bordeaux.
" 20,	875	"	rhubarb root,	Canton.
" 22,	758	"	opium,	London.
" 25,	1,783	oz.	iodine,	"
" 26,	1,075	lbs.	rhubarb root,	Marseilles.
" 26,	875	"	jalap root,	Vera Cruz.
" 29,	3,100	"	" " " " " "	
Oct. 23,	788	"	rhubarb,	London.
" 23,	227	"	gum myrrh,	"
" 25,	13,120	"	yellow bark, spurious,	Marseilles.
" 26,	1,875	"	" " " " " "	Bordeaux.
" 26,	412	"	gum myrrh,	London.

In Boston a number of cases of adulterated opium, and other spurious drugs were also rejected. This will give your readers some little idea of the rascality of traders in such things, and shows the necessity of penal legislation. As well might men poison our fountains as sell us adulterated medicinal drugs, &c.

It was apprehended the revenue would suffer by this law, but Mr. Sec-

retary Walker nobly said, "let no revenue be derived from any nefarious traffic." So far from injury, the revenue is increasing, because genuine drugs and chemicals are taking the place of spurious—for example, the spurious yellow bark was invoiced at \$4 per 100 lbs. when the genuine is worth \$70 to \$90 per 100 lbs. So in other articles.—*Ohio Med. and Surg. Journal.*

On the Treatment of Scabies. By G. Corfe, Esq.—Mr. Corfe states that he rigorously pursues the following plan with a patient affected with itch:—

We provide him with old soiled linen and a worn out sheet; and each morning and evening he is ordered to make a good lather of yellow soap in his hands, and thus dip them wet into a basin of sifted or fine sand, and assiduously rub every part of the body on which the slightest trace of a vesicle exists. Having performed this ablution until the skin tingles smartly, he wipes himself dry, and then rubs the common ung. sulphuris firmly into the itchy parts. He is then enveloped in the winding sheet, and has a pair of old gloves on his hands, and he is left till night, when the same operation is pursued, and repeated daily until the fourth day, when he is ordered to indulge (and a great indulgence it is) in a warm bath, where he again lathers his body in plain soap and water, puts on fresh linen, and is provided with clean sheets, and the cure is from thence invariably effected. The vesicle of course is broken by the friction of the sand and soap; the acarus is exposed, and this ectozoon receives his death-blow by the inunction of the sulphur, which is oftentimes not accomplished by the mere application of sulphur ointment alone. The use of sand-soap balls is more elegant, though not more efficacious.—*Medical Times.*

To the Editor of the Boston Medical and Surgical Journal.
Late Trial for Alleged Poisoning with Arsenic.

DEAR SIR:—The following brief synopsis of a late trial at Worcester, for murder alleged to have been committed nearly *fifteen years ago*, was prepared, at your request, while attending as a witness for the Government.

John Cook, Jr., formerly of Ashburnham, now of Winchenden, was brought to trial Dec. 7th, 1848, in the Supreme Judicial Court, on an indictment charging the murder of his wife Roxanna in February, 1834, by administering arsenic. Chief Justice Shaw and Associate Justices Dewey and Metcalf, on the Bench. Hon. Ezra Wilkinson, of Dedham, Attorney for the Commonwealth. Hon. Benjamin F. Thomas, of Worcester, and Milton Whitney, Esq., of Fitchburg, counsel for the prisoner.

On the part of the Government, evidence was introduced to show that Cook was twelve years younger than his wife; that they were married two years previous to her death; that she had considerable property, which Cook unsuccessfully strove to get possession of. Early in February, 1834, Cook bought arsenic of Dr. Pierce in Ashburnham. Mrs. Cook was a woman of good health, and had an infant child two months old. On Sunday, February 23d, 1834, about 4 o'clock, P. M., Cook drew some cider and urged his wife to drink, telling her it had kept very sweet. In a few minutes after drinking the cider, she had severe pain at the stomach, and made

ineffectual attempts to vomit. Pain and sickness became violent and paroxysmal. During the evening Cook gave his wife hot sling, which aggravated her distressing symptoms. He repeatedly refused to go for a physician, till nearly morning, when Dr. Wm. H. Cutler was called. He found her lying on a bed in great distress at the stomach, the pulse small, the extremities cold, the bowels much swollen—and noticed frequent ineffectual attempts to vomit. She was nearly comatose, and never spoke after he saw her. An emetic of ipecac. and sulph. zinc and purgative enema failed to produce either vomiting or dejections. She died at 10 o'clock, A. M., on Monday, 18 hours after drinking the cider, at which time she was in perfect health. Cook refused to have a *post-mortem* examination; would furnish nothing but his wife's *wedding dress for a shroud*. He was away from home when his wife died. When informed of her death, he made no reply. He was then walking towards his own house, in company with a girl eleven years younger than himself, whom he afterwards married. Soon after the death of his wife, Cook secured the money concerning which there had previously been some altercation.

The body of Mrs. C. was placed in a tomb. For several years afterwards it was observed, by the sexton and others, that the body continued in an unusual state of preservation. Ten years after death, the sexton, a very intelligent man, testified he could have identified the body by the *features alone*, while other bodies, entered afterwards, were totally decayed. In October, 1849, Mrs. Cook's coffin was again opened, and the chest retained its rotundity, the integuments being entire, the face and limbs being then decayed. The fact that Mrs. Cook's body exhibited such apparent tokens of preservation in the regions of the stomach and chest, together with the fact that many bodies whose sepulture in the same tomb at dates much more recent, had become totally disintegrated, served to revive and heighten suspicions which existed against Cook at the time of her death. In February, 1848, by request of the relatives, the remains of Mrs. Cook were obtained by my partner, Dr. Leonard French, and Mr. Wm. L. Lincoln, a medical student, and by myself, delivered to Prof. Webster, at Cambridge. These remains consisted of all the matter of the stomach and intestines; as whatever now remained in that portion of the coffin occupied by the abdominal cavity, its walls and contents, was taken up with a spoon and deposited in glass jars, which were closed and sealed. There was no reason to suspect that this matter had been in contact with the earth, or any source from which arsenic or other poison could have been derived. There was no plate on the coffin. The sexton was present and identified the body. All the manipulations in obtaining, securing, and conveying the remains to Prof. Webster, were conducted with the greatest care, and without the possibility of mistake. From these remains, Dr. Webster testified that he obtained, by chemical analysis, a little more than four grains of oxide of arsenic (white arsenic); which is equal to 3 and 16-000 grains of metallic arsenic. A portion of this arsenic was exhibited at the trial.

A detailed report of Prof. Webster's analysis of this interesting case has been published, from which I transcribe the following:—

"The sealed jars with their contents were delivered to me on the evening of the 14th of February last by two medical gentlemen, one of whom had attended to the collection and removal of the remains. The seals were unbroken. They were taken to the laboratory of the Medical Col-

lege and there opened, when a faint disagreeable odor was perceptible, but far less offensive than had been anticipated. The contents of both jars were turned out into a large wedgwood evaporating dish. They were dark, with different shades of brown and black; the whole were moist, but broken up into many small lumps, some of which had considerable firmness and consistency. Portions of membranes were enveloped in the mass, one of which was apparently part of the stomach or intestines, but so much changed that it was impossible to determine which.

It being improbable that any vegetable or organic poison was present, I proceeded to examine separate portions with a lens, but no particles of arsenic or other mineral substance could be detected. Of the mineral substance usually had recourse to as poisons, none appeared more likely to be found, if any such had been administered, than arsenic, or one of the oxides of that metal, and it seems pretty well settled that the oxide, known as arsenious acid, or ratsbane, resists decomposition more effectually, and for a longer time, than any other mineral poison commonly used. In recent cases of poisoning with this substance, I have more than once been able to detach minute portions from the inner surface of the stomach, particularly in another case upon which I had been engaged a few weeks before this time. It may not be superfluous to state, as showing in some degree how frequently arsenic is employed, or suspected to have been the cause of death, that in the course of the preceding three months no fewer than four cases were submitted to my examination, in two of which arsenic was found.

As it was impossible to obtain any satisfactory results by acting upon the mass of matter from the jars without previous solution, and as it was deemed important not to limit the examination to the whole solution at once, but to subject the matter to all the chemical processes which were calculated to elicit and confirm the truth, the mass was divided into separate portions.

One portion was boiled in pure distilled water for nearly an hour, and strained; the animal matter was coagulated by chlorine, which was subsequently expelled, and the clear solution was treated with hydro-sulphuric acid. A part of this solution was tested by the usual methods, as with nitrate of silver and ammonia, sulphate of copper and ammonia, lime water, &c., in presence of the gentlemen attending at that time the medical lectures in Boston. With these tests, and also with hydro-sulphuric acid, the presence of arsenic was distinctly indicated. No reliance, however, was placed on these preliminary trials, beyond the mere indication that arsenic was probably present.

Another portion of the remains was treated with nitric acid and nitrate of silver, and similar indications resulted.

Having obtained these indications of what was present in the remains, it was necessary to separate the substance, and in such a state that both its physical and chemical characters might be made out beyond question. For this purpose, and as the quantity of poison remaining was not supposed to be large, one third part of the remains left after the preliminary trials, was subjected to the action of sulphuric acid, and completely carbonized, or converted into charcoal; the purity of the acid, and especially its freedom from arsenic, having been previously ascertained.

Another third was heated with hydrochloric acid and chlorate of potas-

sa, filtered and reduced by careful evaporation. That any arsenic acid present might be brought to the state of arsenious acid, the liquid was treated with sulphurous acid.

The remaining third part was treated with pure nitric acid, as employed by Orfila in the case of Cumon.

From these three portions, as many distinct, clear solutions were obtained, each of which was separately again tested, and each gave indications of arsenic.

Each of these solutions was again divided into three parts, and each part was subjected to the three following processes.

One portion of each was examined by the apparatus and process known as Marsh's. In this, hydrogen gas is obtained from zinc, sulphuric acid and the suspected solution. That all doubt as to the purity of the zinc and acid might be removed, and especially their freedom from arsenic, and also that of the apparatus, pure distilled water was first used. The hydrogen was evolved and continued a sufficient length of time to satisfy me that no arsenic was present. Had there been even a minute quantity it would have been taken up by the nascent hydrogen, and have caused a peculiar change in the appearance of the gas while burning, and other effects sufficient to detect impurity.

The apparatus, after thorough cleaning, was now charged with a fresh piece of the zinc, acid and solution, from the remains; the hydrogen evolved was ignited, and the bluish tint of the flame at once indicated the presence of arsenic. The flame was then brought in contact with a white surface of porcelain, and dark spots were produced; the same took place when a piece of clean window glass was held over the flame. Aware that other metals, if present, might produce similar spots, especially if the gas was rapidly evolved, the process was allowed to go on very slowly and continued nearly an hour.

The spots were tested and were arsenical.

Another portion of the solution was now used with the same precautions as before, and the gas was transmitted through a fine tube of glass, containing no arsenic or lead in its composition, and capable of bearing a high degree of heat. As soon as the hydrogen had displaced the air, and was issuing from the open end of the tube, a spirit lamp was placed beneath its central part and that was heated to redness. The decomposition of the gas took place, and a metallic looking crust was formed within the tube, a little distant beyond the red hot portion. No deposit was observed in the hot part of the tube, which would have occurred had any other metal than arsenic been present. The process was kept up as slowly as possible, and continued over two hours. The metallic deposit was then carefully collected and tested in various ways, so as to leave no doubt as to its nature,—it was arsenic.

The process of Marsh has not proved as infallible as was anticipated when it was first announced, and it was found that antimony, for instance, which may have been administered to a patient in some one of its forms, would give a compound gas with hydrogen that burns with a flame, the color of which is so similar to that of arseniuretted hydrogen, the two might readily be confounded; and, moreover, that a similar stain would be produced by antimony upon the porcelain. Fortunately it was discovered that all doubt could be removed by the very simple modification of the

apparatus and process above described. The arsenic, if present, is volatilized in passing along the hot part of the little tube, and condenses in the cool part, but antimony fuses and retains much lustre.

The tube was now detached from the apparatus and the metallic crust was heated; brilliant points began to appear in the upper part, which increased in size and number until distinct octohedral crystals with high lustre could be distinguished by the naked eye. There could be little, if any doubt, that they were crystals of arsenious acid.

To leave no doubt on this point, the crystals were dissolved out by boiling water, and the solution again tested; the result confirmed the previous one.

Another portion of the solution from the remains was treated with hydro-sulphuric acid gas; a copious yellow precipitate was obtained, also indicating the presence of arsenic. But although much reliance has been placed upon this test, it is by no means conclusive; for several substances may be present which will give a yellow color when there is no arsenic. The yellow sulphuret of arsenic may, however, be distinguished by reduction, and if arsenic is present, it is easily separated and obtained in the metallic state, in a small tube, and can then be converted into arsenious acid, and crystallized as before described. This was done, and the result confirmed the other experiments.

Another process to which portions of the suspected solution were submitted, consisted of boiling slips of bright copper in the liquid, with a small quantity of hydrochloric acid, known as Reinsch's process. This process is not so delicate as Marsh's, but gives very satisfactory results, with proper precaution, and was resorted to as confirmatory of the other experiments. By this, the arsenic is deposited upon the copper, and can be removed and subjected to the other tests. As to the quantity that can be detected by Reinsch's process, Dr. Christison, high authority, tells us it will detect "at least a 250,000th part of arsenic in solution." Others say it will detect a 3000th of a grain in 90,000 times its weight in water. But the production of a mere stain upon the copper is not decisive. The copper may be thus tarnished when no arsenic is present; it may be occasioned by organic matters. It is not a process to be solely relied upon for medico-legal purposes. The production of the metallic crusts, and their conversion into arsenious acid and reconversion to metallic arsenic, in each case fully tested in other ways, can alone satisfy the operator.

The most complete method of distinguishing arsenic from antimony, is by converting the arsenical stain into chloride of arsenic, by exposure to chlorine: the chloride may then be converted into the pale yellow sulphuret, which, with ammonia, affords a colorless solution;—by heat the ammonia is volatilized, and the yellow sulphuret is reproduced. The action of nitric and hydrochloric acids, and subsequent evaporation to dryness, afford white rings of arsenic acid, which deliquesce and become invisible; and the deliquesced acid gives, with nitrate of silver, the dirty red stain of arseniate of silver. According to M. Divergie, this series of actions is conclusive. But we have no statement how small a quantity of arsenic or antimony may, in this way, be distinguished.

As the fact to be ascertained in the case of Cook was of such vast importance, and no case, as far as I have discovered, is on record where arsenic had been detected after the the lapse of so many years, it was deemed

imperative on me to subject the solutions obtained from the remains, to every form and method of examination which could throw light upon it; hence, although I have used the terms *tube*, *solution*, &c., it has been done for the sake of brevity, but in fact several distinct portions of the liquid and several tubes were employed—and the fact that arsenic was present in the remains, I consider fully established. How it came to be there, I was not called upon to inquire.

In regard to the question, always, I believe, asked in judicial proceedings, as to the antiseptic power of arsenic, deemed of so much importance in the present case, it does not appear that the popular notion is fully sustained. Experiments have been made by Lager, on the bodies of animals poisoned by arsenic, which go to show that it neither retards nor hastens putrefaction. Seeman's experiments upon dogs show that their bodies putrified as usual. It is probable that the antiseptic power of arsenic has been much over-estimated.

Still there can be no doubt that arsenious acid combines with the fatty and albuminous tissues, and forms compounds which are not susceptible of alteration under ordinary circumstances; and some instances have occurred where the bodies of persons poisoned by arsenic have been found, long after death, in a remarkable state of preservation. In some of these the stomach and intestines have been preserved, although the general mass of the body had disappeared, leading to the detection, of and bringing to light crimes committed many years before.

Another question is probably always put to a witness in a case of suspected poisoning by arsenic, viz: What is a fatal dose? So many and various are the circumstances and conditions, that it is doubtful if any definite answer can be given. We have the case of Bertrand, who took five grains on an empty stomach, with no ill effects—and we have high authority that four and a half grains is a fatal dose. In a case in New York, an ounce was taken, and the pain in the stomach was but slight. Then, again, arsenic does not always produce violent and well-marked symptoms, altho' fatal. It may kill, too, by its narcotic operation, no morbid condition of the stomach being observed after death.

As to the existence of arsenic in the bones, normal arsenic, the early opinion of Orfila, that such is the fact, has not been confirmed by later researches. If found in the state of arseniate of lime, as was affirmed by Couerbe, this would not affect the question as to its presence in the stomach and intestines. In the case of Cook, no portion of the bones was examined.

But Orfila has retracted his former opinion, and a few years ago forwarded to the Academy of Medicine of Paris a statement that he could no longer extract arsenic from bones."

A very large number of medical witnesses were called for the government, and also for the defence. No exceptions were taken to Dr. Webster's chemical evidence, and no attempt was made to discredit the results of his analysis. There was a concurrence of opinion with the physicians that the symptoms of which Mrs. Cook died were consistent with poisoning by arsenic, although vomiting and purging were absent; and also in favor of the antiseptic power of that poison. For the defence, evidence was introduced that contradicted and in some degree impeached one of the prin-

cial government witnesses. The chief Justice charged the jury favorably for the prisoner. After deliberating forty minutes, the jury returned a verdict of **NOT GUILTY**.

ASHBY, Dec., 1848.

ALFRED HITCHCOCK.

Membranous Croup, treated by Cauterization of the Fauces and Larynx with Nitrate of Silver. By Dr. CLARK.

Dr. Clark had treated five cases in this way: three had recovered—two had died.

Aug. 14. Case. I.—A boy two and a half years of age, who had been ill two or three days, and had had croupy respiration for thirty-six hours before he was seen. Cauterization was practiced with some alleviation of suffering, but death ensued on the third day.

Case II.—A girl five years of age and of scrofulous diathesis. The croupy respiration was well marked, and had been present more than twenty-four hours. Cauterization was employed, and much false membrane was expectorated at various intervals. Considerable relief was obtained in this way; but the child died on the fourth day, with symptoms of exhaustion rather than of suffocation.

Case III.—A delicate girl of three and a half years, who had sore throat with hoarseness. False membranes existed in patches on the tonsils, &c.; cauterization was employed. Croupy respiration, however, came on the next evening, but it was relieved in twelve hours, by the expectoration of small fragments of false membrane streaked with blood. The paroxysms of dyspnoea returned several times, being terminated in the same way, and the patient ultimately recovered, although the voice was not wholly restored for three weeks.

Case IV.—A child of four years. The symptoms in this case were not very severe, although quite distinct. The croupy breathing had continued without remission for twelve hours—false membranes were remarked in the throat. The treatment here was followed by gradual and speedy recovery, without the expulsion of any large amount of false membrane.

Case. V.—The patient, a healthy girl of six years, was seen early in the disease, which lasted a fortnight. She had at first a sore throat and a febrile attack, which disappeared the second day. The only symptom which persisted was a slight and increasing hoarseness, and patches of lymph were to be seen on the tonsils and spreading thence back toward the larynx. These increased until the whole throat was invested with a coating of the lymph and the croupy respiration had supervened. The caustic was regularly applied from the beginning, and the expectoration of the membrane began almost as soon as the breathing became much embarrassed. The paroxysms of distress and the intervals of relief followed each other in this way for nearly three days, when the respiration slowly assumed its natural character. The voice could not be raised above a whisper for several days later.

No medicine but Dover's powder was given, and this was repeated often enough to keep the patient constantly under its influence. The caustic was of the strength of xl gra. to ʒj of water, and was used with the small curved probang. The expectorated membranes were exhibited.—*From Record of Bost. Soc. of Med. Improvement. American Jour. Med. Sciences.*

Needle found in the Heart after death. Reported by JOHN NEILL, M. D.,
Demonstrator of Anatomy in the University of Pennsylvania.

Upon the dissection of a black male subject, brought into the anatomical room about the middle of December, my attention was directed, by a student, to a foreign body in the heart. At first, I supposed that it might have been introduced after death, accidentally dropping into the cavity of the pericardium, during the process of stitching after injection; but upon more careful examination of the surface of the heart, no orifice was detected by which it could have entered. I removed the heart and placed it in alcohol, in order to examine it with care.

The pathological condition of the contiguous viscera could not be made out very satisfactorily, on account of the length of the period which had elapsed since death, and from the fact, that an antiseptic injection (chlor. of zinc) had been used, which destroys color and coagulates albumen; there were, however, marks of chronic disease evident, in adhesions of the pleura and serious pericardium; there was also evidence of peritoneal inflammation.

After the heart had been hardened in alcohol, and cleanly washed of clots, I found imbedded in the external wall of the left ventricle, a broken needle, with its point directed forwards towards the apex of the heart; it was much oxidized, and could not be moved from its position, until the cyst containing it was split up. The broken end encroached upon the cavity of the ventricle, being actually contained in one of the columnæ carneæ; the needle was two inches in length, and a line in thickness, belonging to a variety called *worsted needles*.

In the Medical Examiner for May, 1843, Dr. Leaming reports a case of a seamstress, who had accidentally driven a needle, which was sticking in her dress, forcibly into breast, by striking a table. In a month she had pleurisy, and subsequently pericarditis and pneumonia, and at the end of nine months she died. The post-mortem examination revealed lesions, corresponding with the symptoms; the body of the needle was found imbedded partly in the wall of the right ventricle, and partly in the ventricular septum, whilst the point projected for a quarter of inch into the cavity of the left ventricle.

In the summary of the American Medical Journal, a case is copied from the Archives Generales, 1842, in which a soldier introduced two needles into his heart, and was brought screaming into the hospital at St. Petersburg; he had a hard, quick pulse; anxious countenance; copious perspiration; distressing cough, and tumultuous action of the heart; in nineteen days he died; and upon examination after death, it was discovered that the needles had passed through the heart, and lodged in the lower part of the left lung, where they were found in an abscess. The whole track was easily recognised by the marks of inflammation.

In the Annalist for November, 1847, Dr. Graves records a case of attempted suicide. A man pushed a needle into his heart, expecting instant death, as in the instance of Admiral Villeneuve, after the battle of Trafalgar; but being disappointed in the immediate effect, he undertook to cut his throat, which also failed; the vessels having been secured, and the wound dressed by his medical attendant. After reaction had taken place, he had great suffering; every breath being attended with a scream; the

physician discovered the puncture made in the skin by the needle, and dissected through the intervening structures, until he "could distinctly see the heart pulsating with the needle in it." "With the aid of a pair of forceps, I extracted the needle, and it was followed with a forcible stream of blood." "He continued to improve up to the sixth day, when he was attacked with pleuritic pains, and inability to swallow; and died on the eighth day after the needle was taken from the heart." *Post-mortem*.—"On opening into the left ventricle, where the needle entered the cavity, there was a small membranous sac, about the size of a pea, formed in the left ventricle, which contained pus."

NOTE.—I learn, through the politeness of Dr. Klapp, physician to the Moyamensing prison, that this man was admitted May 11th, 1847, in rather feeble health; but continued to work for more than a year before complaining of any inconvenience about his chest. When removed to the infirmary, he had severe cough, with some slight constriction in breathing, and occasional palpitation. These symptoms, though never very urgent, continued until his death. Though never delirious, and able to answer questions to the last, he never spoke of having received any injury of the kind, and never manifested any suicidal tendency.—*Medical Examiner*.

Oct. 23. *Hydrophobia*.—Dr. Coale read the following case occurring recently in his practice.

John Fleming, a hearty full-fed boy, seven years of age, born in England but living in this country for the last four years, was brought to me one day, by his mother, with a slight laceration on the knuckle of the little finger of the left hand. The story was, that an hour before, on his way to school, he threw a stone at a dog under a wagon, and it flew out and bit him, and returned to lie down again. I saw no reason to do more than give some directions about dressing the hand very simply, and was told a few days after that it was entirely healed. Three weeks after, on Saturday Sept. 30th, his mother sent him to me about 2 P. M., saying he had been out of sorts for two or three days; and had refused to drink water for twenty-four hours. I at once determined not to favor any play to the imagination which might make this a case of hydrophobia. Looking at the throat I found it swollen somewhat, about the fauces. I asked him to take a drink on pretence of washing out his throat; but he refused it crying. An active cathartic was prescribed, with directions to let me know if he was not better in the morning. I received a message next morning to call, and found him on a little settee in the corner of the room. His look was stupid, skin cool, pulse 80. Tongue as yesterday, a little furred. The powder had acted slightly. His rest had been very slight, and much disturbed. He complained of a little pain at the epigastrium; but nowhere else, though his mother said he had complained of headache also at times. I asked him to wash his mouth out so that I could see it. He took a tablespoonful of water into his hand, and as if violently resisting and yet violently endeavoring, held it about six inches from his mouth; and then suddenly threw it violently against his teeth, and swallowed it with a convulsive choking, falling back on the pillow and slightly screaming. After a moment or two he walked across the room to let me look into his mouth. I still resisted the tendency towards calling it hydrophobia, and prescribing

pediluvia and aperients, left him. The next day he was better, and not knowing at that time the remitting character of the disease, I was relieved of my fears. He swallowed with ease. Walked across the room and seemed livelier. His mother, however, said he had had a troubled night; seeing phantoms; boys looking in at the window, &c. Pulse frequent; no heat of skin; no lessening of bodily strength.

Tuesday, Oct. 10th.—Visited him with Dr. Oliver. Symptoms much more unfavorable. Pulse over 100. His skin not hot; eyes suffused and sleeping, or stupid looking. Involuntary shivering. Lying on his back with head thrown back. Phantasms more frequent and distressing. Could sit up without assistance. Attempts to swallow water accompanied with violent spasms, principally opisthotonic, indeed very decidedly so. Upon asking to see his tongue, it was protruded convulsively very far; the eyes being widely opened at the same time. Answered questions naturally; but with an expression of alarm. Picking his bedclothes; taking imaginary worms out of his mouth, and out of the water offered to him; and talking wildly when not spoken to. Pressure at nape caused shrieks and opisthotonos. Bowels had not been moved. Prescribed a very active cathartic; and a blister to the nape. Dr. J. Ware, who saw the patient this day, suggested chloroform. None was at hand, and it was 4 P. M. before I could visit him again. I found that at two o'clock he had commenced vomiting, and had vomited some three or four times. His countenance expressed great prostration. Extremities cold. Pulse not to be counted. Respiration not hurried. Spasms more frequent, and more easily excited. Much mucous râle. Two dejections involuntarily and unconsciously. Mind always wandering, though recalled for a moment. Attempted to administer chloroform. Much resistance to it. More tractable when his father administered it. At one time I thought him under the influence of it; but his expression was that of a dying child, and I directed it to be discontinued. The most urgent symptom now was debility. Coldness of nose and extremities. Pulse too rapid to count. Sweat on face. Sinking of features. Directed brandy and chloroform every half hour. Administering this caused spasms, but not as much horror of the fluid. On one occasion he remarked he had spilt more than half, and asked for some more. When not aroused he talked much at intervals, and then would lie quiet until a spasm came on. These were increasing and commencing with a general shiver, and then affecting the muscles of the back and extensors. They were not very violent; never raising the shoulder from the bed; but consisted simply in stretching the head, neck and the arm out; and stiffening of the trunk. About half past five I had to leave, and asked Dr. Buckminster Brown the favor to watch my patient as long as convenient. He saw him very soon after; found him lying with his eyes wide open; pupils dilated; surface heated, in a profuse sweat. Pulse feeble, fluctuating, 232 in a minute; and just afterwards 208. Every ten minutes the child was seized with a convulsive gasp, and then with a general convulsion; the head being briskly thrown or drawn to the left side and opisthotonos strongly marked. These were immediately produced, or greatly aggravated by the introduction of liquid into the mouth. He appeared to be partially sensible of what was said; would gaze on a spoon offered to him, fixing his eyes glaringly upon it as it approached his mouth, and then taking a small swallow with a convulsive gasp and struggle, was thrown into a spasm, and

an expression of great suffering came over his countenance. Symptoms of depressed vitality were marked. Delirium. Dr. B. remained with him one hour and a half, say till 7. At eight I was again with him, and found the same appearances; but with greater prostration of strength, and evident symptoms of approaching dissolution. Fanning him produced convulsions. At half past 9 Dr. Brown again saw him, and reports the convulsions not so violent; legs cold to knees. Brandy and water given; but at once rejected from the mouth with frothy matter. A light produced no change on the pupils, which were widely dilated. The face was bedewed with sweat at times. Left him at 11 with the symptoms of debility fast increasing. From this time until death, the spasms were slight but easily excited, and vomiting accompanied them. He died at 2 A. M., Oct. 11th.

Post-mortem examination with Dr. C. E. Ware.—All organs of abdomen and chest healthy. Pericardium had a little, say 1oz. of fluid (clear) in it. Right auricle enormously distended with blood. Spinal column opened. Much venous engorgement; marrow removed from commencement of cauda equina to medulla oblongata; but nothing abnormal observed.—*From Records of Bos. Soc. for Med. Improvement. Amer. Jour. of Med. Sciences.*

Vaginal Hysterotomy. By JOHN H. GRIFFIN, M. D., of Salem, Roanoke County, Virginia.

I was requested on Wednesday, May 10th, 1848, to visit Mrs. W., of Montgomery County, a young married lady of good constitution, in labour with her first child; but owing to existing professional engagements, was unable to go so far from home (twenty-six miles) on that day; being again sent for, however, that night, I reached my patient on the afternoon of the next day.

I found Drs. Eady, Kent and Jackson in attendance. Labour had commenced at midnight on the previous Monday, and up to that time, although the pain had been strong, no appearance of the "os tincæ" had been detected. After repeated careful examination, I was fully satisfied that the mouth of the uterus was altogether wanting. The external parts were rigid, and extremely sensitive to the touch; but within, what I supposed to constitute the neck of the uterus, was found soft, and spread out into a thin smooth membrane, through which the head of the child could be distinctly felt, and, between the two, during the existence of a pain, the bag-like projection of the distended membranes. But, after the most diligent search, no opening could be found, and nothing to mark the place where it should have been, except a slight degree of roughness, and apparent depression, at a spot not larger than a squirrel shot.

All the gentlemen present, having satisfied themselves of the condition of the patient, concurred in the opinion that the operation of vaginal hysterotomy should be no longer delayed, and requested that I would perform it.

After having the woman properly placed, I carefully sought for the rough depression above referred to, with the hope that I might be enabled to introduce a probe pointed bistoury, and thus effect the necessary division of the neck of the uterus, from a spot clearly indicating where the opening should have been. But in this I was disappointed, not being able to detect any opening, and was at length forced to substitute the sharp

pointed for the blunt bistoury:—both of which had been previously prepared by wrapping them to within a short distance of their points. This was carried down to the same spot, between the fingers, and a free bi-lateral section made, which was afterwards somewhat enlarged, the probe-pointed bistoury being substituted for the sharp. No hemorrhage, worth mentioning, occurred, and, the section being made during the existence of a pain, the operation was performed without the knowledge of the patient.

The pains were now strong and frequent, and, although the presentation was the 6th of Baudelocque, and from the excessive rigidity and tenderness, it was impossible to induce the patient to submit to the entire introduction of the hand, in order to change it to one more favorable, yet it was thought best to delay any further interference, for a short time, with the hope that the natural efforts of the uterus would be adequate to the expulsion of the head. Disappointed in this, the mouth of the uterus being fully dilated, the application of forceps was proposed, and I proceeded to introduce the blades, amidst loud complaints of suffering. Some difficulty was experienced in locking them, and the patient, worn out by long suffering, with that impatience which might have been expected sooner to manifest itself, insisted that the instruments should be transferred to Dr. J. The blades were therefore reluctantly withdrawn, and handed over to that gentleman, who, after some effort, not succeeding in introducing them, again offered me his place at the bed-side, with the hope that my second effort would prove more fortunate than the first; but, as I was about introducing the second blade, the patient positively refused to submit to the operation, and her husband, also a physician, alarmed lest further delay should endanger the safety of his wife, now insisted that the crotchet should be immediately resorted to. My remonstrances were of no avail, and the head was extracted, mainly by the efforts of Dr. Eady, after *seventy two hours* of suffering, to the great relief of the mother, and delight of the friends present; but mingled, in my own case, with regret for the loss of the child, which, if alive at the time of the operation, ought, I think, to have been saved. The mother fortunately recovered, without any symptoms, so far as I have been able to learn, worthy of particular remark. The catamenia, which had been regular previous to marriage, returned in a few weeks.

I am informed by Dr. W. that, during the early stage of pregnancy, Mrs. W. complained of uneasiness and pain within the pelvis, which, at the time, was referred to the bladder; but which the occurrences above detailed renders probable was, in fact, inflammation of the neck of the uterus, by which the os was entirely obliterated; no opportunity has been presented for ascertaining its present condition.

This, according to Professor Bedford, of New York city, is the third time this operation has been performed in America.—*Am. Jour. Med. Sciences.*

See Buffalo Med. Jour., vol. II, for case by Prof. White; and vol. III, for case by Dr. Scott, of Buffalo.

ED. BUFF. MED. JOUR.

State of Medical Education in Turkey.—We are indebted to a medical gentleman, at present residing in Constantinople, for the following details. They point to the existence of a state of matters, of which very imperfect accounts have as yet reached this country; and such as, undoubtedly, is at once the proof and the earnest of a new era in the history of civilization having begun in the East.

"Military hospitals, on a large scale, are either built or a-building in every quarter of the Turkish Empire. There are about one thousand European surgeons attached to the different regiments, two hundred of whom are Jews. The chief professor of the Medical College, Dr. Spitzer, is a Jew. He is also one of the physicians in ordinary to the Sultan. By him I was introduced to H. E. the Hakim Bashy Ismael Effendi, the chief physician of the Ottoman Empire, who kindly permitted me to visit the different lecture-rooms in the Medical College. It is certainly in a very flourishing condition, considering that it has been in existence only eleven years. The pupils are brought, by order of the Sultan, from all departments of the empire, and are lodged, fed, clothed, and educated, at the expense of the government. When qualified as physicians and surgeons, they receive appointments in the army and navy, with salaries of £200 or £300, and upwards, according to rank, without distinction of Jew or Gentile. Until lately, however, there were no Jews in this college; not that the government excluded them, on the contrary, they were invited; but that people, who have been scattered amongst all nations, yet amalgamated with none, would not send their sons to this medical establishment, even although the most flattering prospects of education and worldly advancement were held out to them. But the government condescended to smooth all the difficulties which stood in the way of the improvement of this section of its subjects. Through its agents, it held interviews on the question of conscientious scruples with the chief Jewish Rabbis: and the result was, not only the guaranteeing liberty of conscience to the Jews who should enter the Medical School, but the assigning to them a distinct portion of the college, so that they might live separate from the Gentiles, the appointment of a superintendent of their own persuasion, to see that their religious duties and services should be strictly observed—also a shocket, or butcher, of their own; and, in short, every arrangement was made to prevent their being constrained to do any thing contrary to their conscience. In the language of last year's report of the college authorities,—'*Toutes les difficultés ont été aplanies, et le Gouvernement n'a reculé aucune sacrifice pour exercer aussi son influence civilisatrice sur cette partie des sujets de l'Empire.*' The Sultan lately visited the college, and presided at the examination of the candidates for the medical degree. When the pupils are first introduced to the college, they are, for the most part, raw, ignorant, and uncivilized. They are at first taught Turkish, afterwards the Arabic and French languages; next geography, history, arithmetic, and other elementary branches of education, including natural history. They have already a very tolerable museum of natural objects, well preserved and well arranged. A small botanic garden is also attached to the college. After undergoing a thorough elementary education, the pupils enter their medical course, comprising lectures on anatomy, physiology, chemistry, *materia medica*, practice of physic, surgery, and midwifery. The only room I did not see, was the dissecting-room; it was closed at the time for want of subjects, which it is difficult to procure in a country where so much prejudice against dissection exists, and even against touching a dead body. I was shown into the grand examination room, fitted up with a great throne of state for the Sultan, who presides at the yearly examination of the candidates for the medical degree. There are also a dispensary and hospital attached to the college. The hospital is divided into medical and surgical

wards, and a special ward is set apart for diseases of the eye. Dr. Spitzer delivers clinical lectures in the hospital, which he kindly invited me to attend."—*Monthly Jour. Med. Sci.*

CONSTANTINOPLE, March, 1848.

Medical Schools in Russia.—The medical schools of Russia are carried on in a grand and becoming manner, they are plentifully supplied in every respect. The studies must extend over five years, each year beginning in August, and terminating in June. The whole of May is given up to examinations; all the courses last the full year, and every student is obliged to attend them, irrespective of the peculiar branch of medical science he may wish to study. There are six *censures*, or examinations. If the candidate do not give satisfaction with the first three, he is put back for one year; but when he has creditably passed five, he obtains his doctor's degree. The sixth is only attempted by those who are looking for state appointments. The fourth and fifth are especially dedicated to clinical instruction; after which the young men may settle in any part of the empire.—*London Lancet.*

EDITORIAL DEPARTMENT.

Encouragement of American Medical Periodical Literature. The disposition among the profession of this country to patronize foreign productions, rather than encourage those emanating at home, tends, in no small degree, to repress the growth of our national medical literature. The greater portion of medical works which compose the library of the American practitioner, are republished English productions. Next, in number, are translations of French and German works. Those of American origin occupy, relatively, but a small niche. Many persons seem to have an impression that a national currency, as regards medical literature, is out of the question, and that, to possess any special value, a book must come to us with the stamp of a foreign mint. The mere fact that a work has found a publisher abroad, seems to suffice for its successful reproduction with us; so that it is not an uncommon occurrence for a foreign author, who, with his own countrymen is scarcely known, to have considerable celebrity with us, in consequence of the much greater circulation which he acquires. In this respect, it is emphatically true, that, in the words of the poet, "distance lends enchantment to the scene." A puerile performance by some unfledged candidate for bibliographical reputation who happens to reside at London or Paris, in the minds of some, may take precedence of a work by one whose experience, acquirements, and integrity are sufficiently well known,

but who, unfortunately for his claims upon his own countrymen, resides on this side of the Atlantic. We may perhaps express ourselves in rather too strong terms, but it must be apparent to all who have given the subject attention, that a disposition to overestimate what comes to us from abroad, and to underrate our domestic productions, is too common. This fact, without doubt, discourages many, who, otherwise, would aspire to the distinction of successful authorship, and, hence, tends to impoverish our national medical literature.

We shall not undertake to prove that this virtual concession of inferiority is wholly gratuitous. We leave this point to the reflections of our readers. It is one of the characteristics of the study of medical science, that it not only concerns phenomena which are essentially the same in all countries, but that every country may furnish abundant materials for investigation. The medical philosopher is not under the necessity of traversing oceans and territories to observe or collect objects for his pursuit, but they are always at hand. The human body is the same everywhere—its anatomy—its physiology—and (as a general remark) its pathology. To discover truth, and advance knowledge in this province of inquiry, cannot be a prerogative incident to place, but to industry and skill. Does the American character in the latter particulars fall below that of other countries? This is the question which, without discussion, we leave for our readers to answer. We will only say, that, unless the answer to this question be in the affirmative, it seems to us we are to look for the cause of the poverty of our native medical literature, in a great measure, to the source which we have indicated—viz: a disposition to encourage and patronize an imported literature to the exclusion of a proper respect for that which is of domestic origin. We by no means advocate that overweening attachment to indigenous literature which would deprive us of the benefits of foreign productions. We see the evils of excessive national pride, in this respect, in the difficulty which attends the transportation of scientific developments in France across the English Channel. The arrogant exclusiveness, and bitter prejudices of national pride, are to be avoided, not less than a deficiency of patriotism. The latter, in our country, at the present time, seems an evil to be corrected. So long as a considerable portion of the medical profession are bent on holding a kind of provincial dependency on a foreign country, by seeking with avidity republications and translations, (the only recommendation of many of which consist in the mere fact that they are republications and translations) neglecting, at the same time, the meritorious efforts of our brethren at home, just so long will our

bibliographical medical literature continue impoverished, being made up, in a great measure, of notes and additions to foreign works, by those who are as competent to write books, as to occupy the more humble office of editor and annotator.

Much might be said on this subject, but we did not commence this article with any intention of offering even the few remarks which have been submitted. We designed to allude more particularly to *medical periodicals*. Medical Journals are issued in various parts of the United States, some of which certainly are conducted with ability, and possess great merit. Generally editorial labors are gratuitous, there being very few Journals, in this country, which afford any revenue over the expenses of publication. Yet, under these circumstances, many are with difficulty sustained, the patronage being inadequate even to the cost of publication. We have noticed, of late, announcements that several will be discontinued, unless better sustained, a pecuniary burthen for the issues falling upon the editor. Now, why is it, that an excellent journal, even of long standing, can hardly be sustained, with the gratuitous services of an able editor? One reason, doubtless, is, that the same spirit which determines preferences for foreign books, also tends to encourage foreign periodical literature, to the prejudice of the best efforts of American journalists. We shall content ourselves here with simply suggesting this as a topic of reflection for those who may honor these remarks with a perusal. Our thoughts were directed to it by a few editorial paragraphs contained in our esteemed contemporary, the Boston Medical and Surgical Journal, with which we will take the liberty of concluding this article:—

“Having been requested to notice the American reprint of the *Lancet*, by Messrs. Stringer & Townsend, of New York, we are justified in saying that the first number of a new volume looks extremely well. The work also contains, as every one knows, a great amount of useful matter. But instead of unqualifiedly recommending our medical brethren to patronise it, we prefer urging them to cherish our own periodicals, which need their fostering care. If American Journals of medicine are obliged to go begging, or be discontinued, there can be no native medical literature, and no advances will be made in respect to gathering in the experience of our surgeons and physicians. We advise, therefore, all American practitioners who prefer receiving a foreign periodical, as well as those who do not, to subscribe also for one of native growth, which will not cost so much, yet will have the pith of the European, with the medical intelligence, and medical papers and reports from the highest professional authorities of their own country. A love for home manufactures, home enterprise, and a desire to promote and enlarge the sphere of medical science in the Union, prompts to these observations.”

National Medical College.—The third annual meeting of the American Medical Association is now near at hand. We have noticed the appointment of delegates by medical societies in different parts of the country, and it is to be presumed the attendance will be not less, if not larger, than heretofore. We speak not altogether without knowledge when we say, that our Boston brethren will be prepared to extend to delegates and members of the Association a cordial reception, and it will be the fault of the latter if the occasion be not, socially, at least, one of interest and gratification. As the success and prosperity of the Association depend upon the fullness with which the profession of the country is represented, it is to be hoped that delegates and members will endeavor to be present. Let representatives be selected who, in the first place, are eminently qualified by their capacity and zeal, and, in the second place, who will not fail to attend, unless prevented by extraordinary circumstances. A medical Congress will then be assembled from whose proceedings much good may be expected.

In view of the meeting in May next, it is well for reflecting members of the profession to consider what subjects may come before it, and what useful objects may be submitted for its action. It were desirable that plans to be proposed should be intimated before the meeting takes place, in order that they may, meanwhile, occupy the thoughts of the profession, and thus more matured opinions formed when the time for decision arrives. We do not make these remarks by way of preface to any project which we shall expect formally to introduce to the consideration of the Association, but we have been more and more forcibly impressed with the importance of an undertaking which we believe may be effected by the united efforts of the profession, in connection with the organization which now exists. We allude to a *National Medical College*. In one of the early numbers of the first volume of this Journal, we devoted some consideration to this subject. We would respectfully suggest it again, as a subject which, as it seems to us, is deserving, alike from its importance and feasibility, the attention of the profession.

By a *National Medical College*, we mean an institution of a higher order, and with more extensive scientific and educational objects, than can be embraced within the scope of the numerous existing schools of medicine in different sections of our country. Our idea is not to supersede the latter, but to fulfil ends which are now, and must of necessity continue to be, in a measure, beyond their reach. The purposes of such an institution as we should rejoice to see established, should be two fold: first, to provide,

in the most ample and perfect manner, for the prosecution of each, and all the sciences relating, directly or collaterally, to medical knowledge—anatomy, human and comparative, special, histological, and microscopical; physiology in its most comprehensive signification; pathology; materia medica, botany and pharmacy; chemistry, general and animal; legal medicine, etc. etc. Second, to furnish complete courses of instruction in each, and all of these branches, with every available means and facilities for their elucidation. We would have, in other words, an institution which should, in the first place, combine all the circumstances most favorable to the successful cultivation of the various departments of medical science, and which would therefore conduce, in the highest degree, to the extension of medical knowledge: and, in the second place, an institution where all that is known, or might be developed in the progress of knowledge relating, directly or indirectly, to medical science, should be fully and adequately taught. It is sufficiently evident that no medical college now existing in this country (if in any other) affects to accomplish ends so wide and extensive; nor would it be desirable, if it were attainable, that all schools instituted to prepare students for entering on the practical duties of our profession, should attempt to compass them. The plan to be successfully carried out, must be a national one—it must be adopted by the general government, and sustained by unstinted appropriations from the national treasury.

We commend to the meditations of our readers the immense benefits which such an institution would be calculated to produce. Consider how it would conduce to the progress of scientific knowledge: how it would tend to elevate the character of the medical profession, by furnishing opportunities, as accessible as abundant, for the most profound and varied acquirements, and by raising the standard of qualifications for teachers in the medical colleges of the different states of the Union, and by its effect on our national medical literature! Consider, too, the position which American Medicine would be enabled to hold among other nations by such an exponent of its progressive and high character! We will not pursue the subject from these, and other points of contemplation, but leave it to be amplified by the reflections of our readers. If it strike their minds as it does us, it is a subject which is calculated to inspire the most animating and patriotic sentiments. The details of the plan we do not profess to have elaborated. This is to be done by the matured deliberations of combined intelligence and experience.

But it may be said, the enterprise is very well upon paper, but it is an air-castle—a chimera, which can never be realized. This incredulosity

will perhaps be expressed by some who have no skepticism as to the propriety of undertaking the construction of a rail road to the Pacific! The truth is, the medical profession of the United States, having never exerted their united strength, members of it are apt to underestimate the power which the profession is capable of exerting. We believe, and, indeed, we have no doubt of the feasibility of the project. To effect it, the profession have only to resolve that it *may*, and *shall* be done. We assume that the General Government may constitutionally appropriate means to sustain a national institution of the character proposed. We suppose there need be no question as to this power. The question then is, can Congress be induced to do it? We answer that there is no room to doubt that they can be. In the project there is assuredly nothing sectional, nothing selfish. The objects are truly national, and in every respect consistent with the highest principles of civilization and philanthropy. Now, is it too much to think that the medical profession of this country can succeed in bringing our legislators to appreciate the character of the project, and to act accordingly? Let the American Medical Association, representing, as it does, the voice of the medical profession of the United States, agree upon a plan to be submitted, and let the members of the profession in the different states of the Union exert their influence, each in his own sphere, to bring about its adoption, and it will be done. We are aware that it is a common remark, and a just one, that legislation has heretofore done but little for the medical profession in this country, often, indeed, appearing to disregard its claims and interests. But why is this? It is because the profession has never exerted its combined influence to obtain measures of protection and fostering care. It must be obvious to every one, on a little reflection, that there is no body of men who are capable of effecting more through legislative action than medical men, if they were to unite for a common object, and choose to exert their combined influence to accomplish it. Union and effort alone are necessary. The profession of the whole country has now an organization in the American Medical Association. By means of this organization union may be secured, and through the instrumentality of its members in different states, the profession generally may be incited to exertion. Let us test the power which we can exercise by our collective, concentrated energies, in an effort to establish an Institution which will confer honor on the Association, the profession, and the country, and redound in an eminent degree to the interests of humanity!

Practice versus Precept.—Attempts are frequently made by different persons to impair public confidence in medical science. Various motives are involved in such efforts. Some are actuated by cupidity, others, with more honesty, but less good sense, become infatuated with a popular medical delusion. In many instances of the latter class of individuals, the aberration is transient, more especially if the persons have the good fortune not to become very deeply committed, and still more, if they have not, like Dr. Sangrado, written a book, in which case they are apt to find themselves in an awkward position. Some striking exemplifications of the antithesis of precept and practice, are furnished in the history of some of these self-sufficient belligerents. A case in point, which has suggested these remarks, has happened recently to fall under our notice in the pages of a weekly newspaper published in a New England village, the *Northampton Courier*. Dr. Sylvester Graham (appropriating the title of the profession, which he holds in so low estimation,) is a resident of that village. Many of our readers, probably, have heard of him, as he has rendered himself notorious by sundry publications, and by lecturing upon the bread system of diet. We give the article taken from the paper referred to, in full. The editor's remarks will commend themselves as sensible, and appropriate to the occasion:—

Dr. Graham's Advice.—An article from the prolific pen of Dr. Sylvester Graham, giving advice on diet and regimen, to California adventurers, appeared in the *Gazette* last week, with a sort of indefinite commendation by the editor. The Doctor is a good temperance man, and gives wholesome advice on that subject. His advice in regard to clothing, diet and bathing, contains more or less good doctrine, mixed up with notions of his own, of which we express no opinion. But his attempt to dissuade from the use of medicine, even in the most dangerous sickness, is, in our judgment, wrong and dangerous, and is contradicted by his practice in relation to himself. He says:—

"If you become ill, or even decidedly sick, I charge you, nay, I solemnly conjure you, *take no medicine*. Let no one prevail on you—let nothing induce you to swallow drugs, even if the Asiatic cholera attacks you. In all cases of indisposition, in all kinds of sickness, let cold water, pure air, abstemiousness, fasting, hand-rubbing, and rest, constitute your remedial means; and let your administration of these means correspond, as to promptitude, energy, freedom and boldness, with the force of your morbid symptoms; and, if it be not your destiny to die in spite of any means, you will soon recover and be on your feet again.

If you wisely observe the regimen I have prescribed for you, there is hardly a probability that you will be sick."

Now mark the Doctor's practice, and see how it agrees with his teachings. A few years ago he was dangerously sick, and employed a regular physician to attend him, submitting himself entirely to his advice and prescrip-

tions. He took medicine regularly, and that which contained opium and calomel, knowing that they were ingredients of what he took, though he had often scouted the use of those drugs. It was when death stared him in the face that he abandoned his own system; and it is now, when in health, that he counsels others to adhere to it, at all hazards.

As he claims to be "*a public man*," and gives advice with the confidence of a learned and accredited practitioner, it becomes him to show why he advises those who go to California, to "*throw physic to the dogs*," when he uses it himself in dangerous sickness.

The above is by no means a rare illustration of a similar contrast between precept and practice. We have ourselves met with not a few cases of like character. But, so far as our observation goes, the instances are very few in which a person whose *philanthropy* and *sense of duty* constrained him to employ great diligence in advocating an imposition, or delusion, so long as his infatuation lasted, feels it incumbent to take equal pains to undo the mischief he may possibly have done, when, afterward, his sober reflections, or experience, have led him to perceive the errors he had fallen into. This is a significant fact.

Convention of Delegates from Western Schools.—We are authorised by the Faculty of the school with which we are connected, to state, that they will cheerfully unite in the proposed convention of western schools, provided *all* the schools interested will do so. If it be generally preferred that the convention should be held on the last Tuesday of April next, as suggested by the editor of the Western Lancet, the Buffalo School will not oppose it, but the plan of holding the meeting at Boston before, after, or during the session of the American Medical Association, would be more acceptable. The objection that a meeting of western delegates should be held on western soil, does not strike us as possessing much force; on the other hand, it seems to us there would be an advantage in comparing views with those connected with eastern schools, and it is not improbable that a convention of the schools of all sections might be held at the same time and place, the advantages of consultation and united effort being thereby extended. The last Tuesday of April is also objectionable because it will interfere with attendance at the National Association. An earlier or later date would have been preferable. We hope the suggestion by us that the meeting be held at Boston will be favorably considered, but the Buffalo school will endeavor to be represented at any time and place that the majority may deem expedient, provided *all* consent to the measure.

Dr. Morton's new and splendid work on Anatomy, will be noticed in our next No.; also Graves' Clinical Medicine, Gooch on females (which have just been received), and other new publications.

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ORIGINAL COMMUNICATIONS.

ART. I.—*Fracture Tables. Showing the Results of Treatment in one hundred and thirty-six Cases.* By Dr. F. H. HAMILTON.

The following tables have been made for the purpose of determining the average results of treatment in fractures. The cases, 136 in number, have been collected from various sources, but in no one instance has a case been admitted which I knew to have been managed by an empiric. A few have been furnished by the Buffalo Hospital of the Sisters of Charity, of the surgical wards of which I have the charge; some from my own private practice; twenty or thirty of the ancient fractures were supplied by the medical students in attendance upon the lectures at Geneva and Buffalo Medical Colleges, in reply to my request that such members of the class as had received fractures would call upon me and permit me to make a record of their cases. These young gentlemen being generally from the better classes of society, it was presumed would have received the best treatment which the country could furnish. The remainder have been obtained casually, or as they have been directed to me for the purpose of examination by physicians who have themselves treated the cases, and who wished to aid me in my investigations. No case has been sent to me by one physician which had been treated by another. In short I have sought to make the tables a fair representation of the results of the practice of skillful surgeons, or at least of those who by us are regarded as qualified to practice surgery. If the results are not equal to the expectations of the

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friends of our science, let them first reflect that no such tables have before been made, and that whatever opinions they may have entertained, such opinions were not based upon general statistics, but only upon individual experience. I wish them also to examine again their own cases, and if they have relied solely upon the statement of the patients, or of their friends, that no shortening exists, they will find, I think, a great many instances in which a careful and proper admeasurement will prove that both were deceived. A shortening of half an inch in the lower extremities will frequently produce a manifest halt, while, on the contrary, I have seen a shortening of an inch which was entirely concealed in the gait. But especially are both patients and friends liable to be deceived in relation to the shortening of a humerus, or even of a clavicle.

If any one shall be so ungenerous as to charge that such may be the results of Erie County surgery, but not of American surgery, I reply, that a very large proportion of the patients have come from other counties and states; some from the hospitals of large cities, and that even foreign hospitals have a respectable representation of bad cases.

The number of fractures is by no means sufficient to warrant positive inferences, but they certainly ought to be regarded as furnishing approximate evidence. We hope that others will occupy themselves in constructing similar tables, by which the fairness of these may be in some manner tested; for we are certainly as desirous as any one that this branch of surgery should not be disparaged.

Some will be surprised that I have always omitted to mention whether the fracture was oblique or transverse. This is an important condition by which to determine the ease or difficulty of adjustment and retention. But in very few of the ancient fractures could this be ascertained; and I am ready to confess that, with regard to the femur at least, when recently broken, I am not often able to determine positively whether the fracture is transverse or oblique. But as in children the fracture is generally transverse, while in adults it is more often oblique, the age, which is given in each case, will enable the reader to form some opinion as to the frequency of the one or the other.

In the tables *y.* is written for *year*, *m.* for *month*, *w.* for *week*, *u.* for *united*, *n. u.* for *not united*, *in.* for *inch*, *p.* for *perfect* and *i. p.* for *imperfect*. I call a limb "perfect" when there is no striking deformity, shortening or maiming.

Names of bones.	Point of fracture.	Character of fracture.	Name of patient.	Time since occurred.	Present age of patient.	United or not united.	Amount of shortening.	Perfect or imperfect.
1 Ossa nasi		simple	S. L.	12 y.	22 y.	u.		ip.
2 " "		"	M. L. P. H.	20 y.	27 y.	u.		ip.
3 " "		compound	G. R.	2 m.	24 y.	u.		ip.
4 Vomer			W. W.	8 y.	23 y.			ip.
5 Inf. maxilla	shaft	comp. com.	V. W.	1 y.	24 y.	u.		p.
6 " "	"	" "	N. B.	8 y.	23 y.	u.		p.
7 " "	"	" "	J.	8 y.	25 y.	u.		p.
8 " "	"	" "	P.	2 y.	45 y.	u.		ip.
9 " "	"	" "	C. B.	3 y.	55 y.	u.		ip.
10 Clavicle	out. $\frac{1}{2}$	simple	K.	2 y.	4 y.	u.		p.
11 " "	"	"	Miss M'K.	2 y.	18 y.	u.		p.
12 " "	"	"	H. W.	3 y.	27 y.	u.	$\frac{1}{2}$ in.	ip.
13 " "	"	"	A. C.	5 w.	40 y.	u.		p.
14 " "	"	commin.	B.		40 y.	u.	$1\frac{1}{2}$ in.	ip.
15 " "	"	simple	B.	1 y.	41 y.	u.	$1\frac{1}{2}$ in.	ip.
16 " "	"	"	S. C.	2 y.	7 y.	u.		p.
17 " "	mid.	"	Mrs. R.	34 y.	40 y.	u.		ip.
18 " "	"	commin.	C. C.	14 y.	63 y.	u.	1 in.	ip.
19 " "	out. $\frac{1}{2}$	simple	J. P.	2 y.	24 y.	u.	$\frac{1}{2}$ in.	ip.
20 " "	"	"	W.	1 y.	46 y.	u.	$\frac{1}{2}$ in.	ip.
21 " "	"	"	F. G.	4 y.	40 y.	u.		p.
22 " "	"	"	"	3 y.	40 y.	u.		ip.
23 " "	"	"	S. E.	8 w.	25 y.	u.	$\frac{1}{2}$ in.	ip.
24 " "	"	commin.	L.	9 w.	40 y.	u.	$\frac{1}{2}$ in.	ip.
25 " "	mid.	"	"	8 m.	29 y.	u.	1 in.	ip.
26 " "	out. $\frac{1}{2}$	simple	C. U. H.	49 y.	68 y.	u.		ip.
27 " "	"	"	P. R.	3 m.	24 y.	u.		p.
28 Acromion process, external to junct. of clav. with p.		simple	S. P. K.	4 y.	25 y.	u.		ip.

2. Left nostril much obstructed—nose turned to right.

4. One nostril is nearly closed, and has had a catarrh ever since.

5. Broken on both sides by a club, through centre of shaft. A small piece exfoliated several months after and came out externally.

6. Broken on both sides, by the heel of a man's boot. United very slowly.

7. Broken on both sides by a brick bat. Had much trouble with it.

10. Treated with Fox's apparatus. It was a *bend* rather than *fracture*.

11. An extraordinary case of a partial fracture with *bending* in an healthy adult.

13. Fragments were never displaced.

14. Broken in three pieces. Central piece stands nearly at right angles with the shaft. He says he has nearly lost the use of the arm from the accident.

15. This is the same case as the above, refractured by being thrown from a carriage.

17. Got out of place three times, slight deformity still remains—has been a little lame at times since the accident.

18. No axillary pad was used; shoulder drops; central fragment turned nearly at right angles with shaft; can use arm as well as ever.

19. Dressed ten days after fracture; used Fox's apparatus; ascribes the deformity to his own carelessness; arm not quite as strong as the other; gaining.

23. Used a cross on back, and axillary pad; was united in fourteen days.

25. The central piece is much out of line; use of arm complete.

28. United by ligament.

	Name of bone.	Point of fracture.	Character of fracture.	Name of patient.	Time since occurred.	Present age of patient.	United or not united.	Amount of shortening.	Perfect or imperfect.
29	Humerus	mid. $\frac{1}{2}$	"	B. F. McC.	8 w.	11 y.	u.		p.
30	"	up. $\frac{1}{2}$	"	B.	3 y.	68 y.	u.		p.
31	"	low $\frac{1}{2}$	"	J. G.	10 w.	40 y.	u.		ip.
32	"	"	"	B. G. M'K.	23 y.	27 y.	u.		ip.
33	"	"	comp. com.	S. H. H.	17 y.	24 y.	u.		p.
34	"	"	simple	A. G. E.	15 y.	22 y.	u.	$\frac{1}{2}$ in.	ip.
35	"	"	"	C. C.	30 y.	63 y.	u.	$\frac{1}{2}$ in.	ip.
36	"	ext. c.	"	H.	3 m.	8 y.	u.		ip.
37	"	low $\frac{1}{2}$	comp. com.	H. U.	8 m.	35 y.	u.		ip.
38	"	cond.	simple	J. R. S.	18 y.	21 y.	u.	$\frac{1}{2}$ in.	ip.
39	"	mid.	"	A. L.	5 y.	30 y.	u.		ip.
40	"	low $\frac{1}{2}$	betw'n con.	P. O'B.	3 m.	10 y.	u.		p.
41	"	int. c.	simple	C. C.	3 m.	11 y.	u.		p.
42	"	low $\frac{1}{2}$	"	T.	4 y.	24 y.	u.		ip.
43	Radius	neck	"	E. F.	1 y.	12 y.	u.		ip.
44	"	low $\frac{1}{2}$	"	S.	6 y.	22 y.	u.		p.
45	"	"	"	S.	1 y.	14 y.	u.		p.
46	"	"	"	J. B.	4 y.	21 y.	u.		p.
47	"	mid.	"	P. K. S.	11 y.	22 y.	u.		p.
48	"	low $\frac{1}{2}$	"	S. J. B.	10 y.	22 y.	u.		p.
49	"	"	"	Mrs. G.		44 y.	u.		ip.
50	"	"	"	Mrs. C.	2 y.	40 y.	u.		ip.
51	Ulna	olec p.	simple	S. D.	6 w.	14 y.	u.		p.
52	"	mid.	compound	C. C.	2 y.	11 y.	u.		p.
53	"	"	simple	H. G.	3 y.	12 y.	u.		p.

30. This was a fracture through the surgical neck.

31. Elbow stiff—wishes to know whether he ought not to prosecute!

32. Arm much bent at seat of fracture; cannot supine hand completely; ulnar nerve very sensitive; inner half of arm and two small fingers are numb; power of arm much impaired.

33. About one year after accident a piece of bone came out.

34. Slightly bent; not as strong as the other arm and considerably smaller.

36. External condyle is displaced; joint rather stiff.

37. Elbow ankylosed.

38. Condyles separated $\frac{1}{2}$ an inch; much grating between articular surfaces; cannot perfectly straighten the arm; arm occasionally becomes lame; muscles of arm wasted.

42. Bent inwards slightly.

43. Very little power of flexion or extension; no supination.

44. Fracture was oblique; lower end of ulna dislocated at the same time.

46. Both ulnas were slightly displaced at lower end at same time, and still remain so; wrists weak.

49. Ends of fragments pitched in; ulna thrown out; cannot prone hand; many years since the fracture occurred.

50. Lower end of ulna slightly displaced inward; os lunare slightly displaced backward; has had very little use of arm since the accident; it is tender; often painful, and constantly weak.

52. An anterior luxation of the head of the radius at the same time.

Fracture of bone.	Point of fracture.	Character of fracture.	Name of patient.	Time since it occurred.	Present age of patient.	United or not united.	Amount of shortening.	Perfect or imperfect.
54 "	"	compound	M. A. S.	3 y.	11 y.	u.		p.
55 "	low $\frac{1}{2}$	simple	C. H. B.	2 y.	23 y.	u.		p.
56 "	"	"	Mrs. E. S.	10 w.	26 y.	u.		p.
57 "	"	"	Mrs. —	8 w.	25 y.	u.		p.
58 "	"	"	C. P.	4 w.	38 y.	u.		p.
59 "	up. $\frac{1}{2}$	"	E. O. B.	3 y.	35 y.	u.		ip.
60 radius and ulna	low $\frac{1}{2}$	"	S. D.	9 w.	14 y.	u.		ip.
61 "	"	"	Mrs. B. B.	6 w.	30 y.	u.		p.
62 "	"	"	H. A. T.	21 y.	31 y.	u.		p.
63 "	"	"	G. B. P.	13 y.	21 y.	u.		p.
64 "	" $\frac{1}{2}$	"	L.	1 y.	10 y.	u.		ip.
65 "	"	"	H. N.	10 y.	26 y.	u.		p.
66 "	"	"	Miss H.	1 y.	7 y.	u.		p.
67 "	"	commin.	T. K. S.	11 y.	50 y.	u.		ip.
68 "	"	simple	P. M.	1 y.	7 y.	u.		p.
69 "	" $\frac{1}{2}$	compound	L. B.	2 y.	35 y.	u. u.		ip.
70 "	up. $\frac{1}{2}$	simple	N.	1 y.	9 y.	u.		ip.
71 "	mid. $\frac{1}{2}$	"	J. L. S.	3 m.	26 y.	u. u.		ip.
72 "	low $\frac{1}{2}$	"	J.	3 m.	7 y.	u.		p.
73 rib 4th	"	"	F. G.	5 y.	40 y.	u.		p.
74 rib 10th	ant. $\frac{1}{2}$	"	B. N.	6 y.	30 y.	u.		ip.
75 rib 6th	"	"	Mr. M.	2 y.	45 y.	u.		p.
76 rib 3d	"	"	W.	1 y.	40 y.	u.		ip.
77 post. sup. spin. p. ileum	"	"	Miss R.	4 m.	20 y.	u.		ip.
78 neck of femur	"	"	R.	4 y.	9 y.	u.	$\frac{1}{2}$ in.	ip.
79 "	"	"	Miss B.	3 y.	53 y.	u.		ip.
80 "	"	"	Mr. E.	1 y.	78 y.	u.		ip.
81 "	"	"	Mrs. S.	1 y.	77 y.	u.		ip.
82 "	within c.	"	J. C. B.	4 y.	52 y.	u.	$\frac{1}{2}$ in.	ip.

55. Lower end of radius luxated backwards and outward at same time; circumference of wrist $\frac{1}{2}$ of an inch greater than left wrist; cannot supine hand completely.

59. Lower end of ulna is displaced also; at seat of fracture much bent.

60. Much bent—was not treated for a fracture.

61. Was left unreduced two weeks.

62. For three or four years after the fracture a deformity was so apparent that some talked of refracturing it. It is now impossible to discover the seat of fracture.

64. This was two weeks unreduced, at the end of which time I reduced it as perfectly as the callus would permit. A slight bend remains.

65. But the ulna is displaced inward $\frac{1}{2}$ of an inch.

67. The ulna had been broken before and was crooked; and I did not have the case under treatment until the third week after the accident. Deformity is slight.

69. The ulna had united shortened; the radius was not united at the end of two years; power of pronation and supination lost, I sawed off the end of fragments and replaced them; they united and made a good arm.

71. Ulna united, but radius still moveable.

77. Projects.

78. It did not unite under a year; limb is turned in slightly and weak.

81. Shortened; has not used the limb since the accident; is bedridden.

82. See this case and the *trial* reported in the present vol. of this Journal.

Case of patient.	Time since fracture occurred.	Present age of patient.	United or not united.	Amount of shortening.	Perfect or imperfect.
83 " "	3 y.	76y.	u.		sp.
84 " "	7 y.	59y.	u.	2 in.	sp.
85 shaft of femur	mid. $\frac{1}{2}$	3 y.	8y.	u.	2 in. sp.
86 " "	"	3m.	14y.	u.	2 in. ip.
87 " "	low. $\frac{1}{2}$	2 y.	30y.	u.	2 in. p.
88 " "	mid. $\frac{1}{2}$	8w.	35y.	u.	2 in. sp.
89 " "	"	2 y.	41y.	u.	1 in. sp.
90 " "	"	8w.	8y.	u.	sp.
91 " "	"	8 y.	22y.	u.	p.
92 " "	"	8m.	5y.	u.	p.
93 " "	"	2 y.	5y.	u.	sp.
94 " "	"	H.	—	u.	sp.
95 " "	"	Dr. B.	2 y.	40y.	1 in. sp.
96 " "	"	M. H.	17w.	25y.	2 in. sp.
97 " "	up. $\frac{1}{2}$	S. A.	8 y.	40y.	2 in. sp.
98 " "	low. $\frac{1}{2}$	L.	1 y.	32y.	p.
99 " "	mid. $\frac{1}{2}$	J. B.	1 y.	40y.	1 in. sp.
100 " "	simple	J. B.	6 y.	40y.	1 in. sp.
101 " "	mid.	J. P.	11 y.	84y.	2 in. sp.
102 " "	simple	J. P.	—	—	2 in. sp.
103 " "	"	W. T.	5 y.	33y.	1 in. sp.
104 " "	"	B. L. D.	20 y.	50y.	1 in. sp.
105 " "	up. $\frac{1}{2}$	J. R.	3m.	25y.	u.
106 top of trochanter major.	"	M.	5w.	20y.	sp.
107 patella.	"	G. J.	8m.	5y.	sp.
108 " "	"	R. J.	1 y.	20y.	ad.
109 Fibula	low. $\frac{1}{2}$	L. J. B.	10 y.	22y.	u.

83. Died before she left her bed.

84. Did not walk in six months; no splints were used.

96. 13 weeks before union occurred.

98. Broken once before at same point, and was then shortened the same.

89. Both legs are much bent, and continue to bend, from a morbid softening.

93 and 94. Both thighs broken at same time. I cannot therefore determine whether any shortening has occurred; they are of the same length, slightly bent.

96. Has a partially ankylosed knee—talks of prosecuting.

101 and 102. Left thigh united shortened two inches; one fracture in right thigh united shortened, and the other did not, but it was shortened four months after the accident two inches; no extension and counter-extension had been used; I made the right leg unite by pressure and rest in a few weeks from this time. Both thighs are now shortened two inches and bent.

103. Surgeon was prosecuted but acquitted.

105. Foot turns out very much; trochanter major very prominent; slipping in joint; often has pain in joint; did not walk for two years after the accident.

106. Fragment is carried upward half an inch.

107. Separated half an inch.

108. This was a very small fragment broken from the upper and inner edge. It remained separated about $\frac{1}{4}$ of an inch.

109. Displaced inward at seat of fracture; tibia slightly displaced outward; use of limb perfect.

Names of bones.	Point of fracture.	Character of fracture.	Name of patient.	Time since it occurred.	Present age of patient.	United or not united.	Amount of shortening.	Position of foot or imperfect.
110 "	low $\frac{1}{4}$	"	E. T. B.	1 y.	40y.	n.		p.
111 "	low $\frac{1}{4}$	"	F.	2m.	40y.	n.		p.
112 "	low $\frac{1}{4}$	"	H. W.	4m.	38y.	n.		sp.
113 Tibia	low $\frac{1}{4}$	compound.	P. M.	3m.	28y.	n.		ip.
114 "	up. $\frac{1}{4}$	simp. tran.	Mrs. W.	3m.	60y.	n.		p.
115 Tibia and Fibula	up. $\frac{1}{4}$	comp. com.	N. K.	6 y.	20y.	n.	$\frac{1}{2}$ in.	ip.
116 "	mid. $\frac{1}{4}$	"	J. H.	3 y.	38y.	n.	$\frac{1}{2}$ in.	ip.
117 "	"	"	H. C.	3m.	30y.	n.	$\frac{1}{2}$ in.	ip.
118 "	low $\frac{1}{4}$	"	A. H.	2 y.	40y.	n.		sp.
119 "	low $\frac{1}{4}$	"	L. D.	17 y.	31y.	n.	$\frac{1}{2}$ in.	ip.
120 "	mid. $\frac{1}{4}$	"	J. S.	2 y.	40y.	n.		ip.
121 "	up. $\frac{1}{4}$	simple	F. G.	1 y.	40y.	n.		p.
122 "	3 points.	commin.	F. G.	5 y.	40y.	n.	$\frac{1}{2}$ in.	ip.
123 "	low $\frac{1}{4}$	simple	Mr. H.	18 y.	68y.	n.		ip.
124 "	"	"	A. L.	2m.	7y.	n.		p.
125 "	" $\frac{1}{4}$	comp. com.	J. C.	6m.	23y.	n.	1 in.	ip.
126 "	mid. $\frac{1}{4}$	"	J. C.	6m.	23y.	n.	1 in.	ip.
127 "	"	"	M. F.	1 y.	8y.	n.		ip.
128 "	low $\frac{1}{4}$	"	S.	1 y.	9y.	n.		p.
129 "	mid. $\frac{1}{4}$	"	W. C.	3 y.	14y.	n.	1 in.	ip.
130 "	low $\frac{1}{4}$	simple	E. P.	8m.	22y.	n.		p.
131 "	"	"	Mr. H.	4m.	35y.	n.		p.
132 "	" $\frac{1}{4}$	comp. com.	W. S.	7 y.	40y.	n.	1 in.	ip.
133 "	"	simple	J. H.	8 y.	48y.	n.	$\frac{1}{2}$ in.	ip.
134 "	mid. $\frac{1}{4}$	compound.	G.	20 y.	36y.	n.	1 in.	ip.
135 "	"	simple	A.	6m.	33y.	n.	$\frac{1}{2}$ in.	ip.
136 "	"	compound.	F. M.	5 y.	43y.	n.		ip.

112. A dislocation of ankle occurred at same time; patient set it himself; did nothing for fracture; united slightly bent in; use of limb complete.

113. Astragalus broken at same time—ankle partially ankylosed.

115. Produced by fall of a tree on leg; placed on single inclined plane, with foot elevated and moderate extension used; foot sloughed off.

117. Ulceration extended around leg below knee; large slough on heel; also in front; portion of tendon of extensor longus pollicis sloughed out. Prosecuted surgically.

119. Leg bent slightly at seat of fracture.

120. 13 days after the accident amputation was made; patient died the next day.

122. Broken four inches below knee, at middle and near ankle.

123. For several years he was a little lame; both bones slightly displaced and bent at seat of fracture.

125 and 126. Ant. tib. art. was ruptured.

127. Died in a few weeks.

128. Three months after accident a small piece of bone was exfoliated.

132. Piece of bone sawn off after several months; ankle ankylosed; large irregular deposits of bone; several pieces have exfoliated.

133. There is a lateral inward displacement of tibia of $\frac{1}{4}$ of an inch. Six months before the leg was as good as the other.

136. Necrosis of bone.

SUMMARY.—*Ossa Nasi*, three cases; of which none are perfect; there being more or less deformity in each case.

Vomer, one case, with lateral displacement.

Inferior Maxilla, whole number five; all in adults; all compound comminuted; all have united. Three are perfect and two imperfect.

Clavicle, total eighteen. Perfect six; imperfect twelve. Two of the six perfect cases are children under eight years. Fifteen occurred near the junction of the outer third with the inner two-thirds; three near the middle. Four were comminuted; fourteen simple. I believe not more than three or four were transverse. All have united. Eight shortened from a quarter of an inch to an inch.

Acromion Process, one case; united by ligament, but use of arm perfect.

Humerus, fourteen. Twelve simple; two compound comminuted; thirteen united, one not united; three shortened from half to three-quarters of an inch. Five perfect; nine imperfect.

Radius, eight. All simple. Five perfect; three imperfect.

Ulna, nine. Seven simple; two compound. Eight perfect; one imperfect.

Radius and Ulna, thirteen. Eleven simple, one compound, and one comminuted. Two not united. Seven perfect; six imperfect.

Ribs, four. All simple. Two perfect; two imperfect.

Posterior Superior Spinous Process of Ilium, one case, and this left the fragment projecting.

Femur, Twenty-eight. Seven through the neck; whether within or without the capsule I have not determined in but one instance. The signs are generally too obscure to make a positive diagnosis. Twenty-six simple; two comminuted. Of twenty broken through the shaft, fourteen are shortened from half an inch to two inches. Only two fractures of the shaft of the femur, out of fifteen cases occurring in adults, are perfect. Probably all the fractures through the neck are shortened, but they were not all measured since recovery.

Patella, three. All united by ligament.

Fibula, four. Two perfect; two imperfect.

Tibia, two. One perfect; one imperfect.

Tibia and Fibula, Twenty-two. Seven simple: fifteen compound, or comminuted, or compound and comminuted. Nineteen united: three not united. Twelve shortened from quarter of an inch to an inch and a half. Five perfect; seventeen imperfect.

ART. II.—*Semi-Annual Report of the (Buffalo Hospital of the Sisters of Charity.)*

We insert with pleasure the following first semi-annual report of the only organized hospital at present in practical operation in this city. The reader will perceive that already, in the short period of its existence, much good has been effected, notwithstanding the accommodations and resources of the institution are as yet limited. The donations of benevolent persons here, and in other places, have exceeded immediate necessities, sufficiently for the commencement of additions to the building. We trust that farther aid may be obtained by private contributions, and by legislative appropriation, sufficient, not only to complete the improvements already in progress, but to undertake others which will extend still more the facilities for affording relief to the sick and destitute. (As its title imports the hospital is placed under the executive management of the Sisters of Charity. The sister superior, or, as she is called, the *sister servant*, has the direction of the interior affairs of the Institution. Associated with her, for ministration to the necessities and comfort of the sick, are, at present, four sisters of the order. The fact that the services of these intelligent, educated, and pious sisters are bestowed without compensation, conduces greatly to the economy of the Institution; but aside from this, the same capabilities and fidelity could not be purchased by any pecuniary consideration. No salary, however great, could afford a substitute for motives derived from the religious obligations which actuate these devoted females to consecrate their lives to the offices of charity. The general affairs of the hospital, exclusive of the interior details, are under the control of a board of directors, acting in conjunction with the Bishop of the Roman Catholic Church in the diocese of Buffalo. By the philanthropic efforts of the latter, the Institution has been created. It is a Catholic Institution, in the denominational sense of that term; but it is, at the same time, Catholic in a broader sense than when the term is applied to designate a particular denomination of Christians. It is, in other words, in no manner exclusive. It extends relief to the sick of all creeds, and of no creed, making no discrimination on the score of religious, or non-religious professions. Patients are always at liberty to elect their own spiritual counsellors, and every facility is afforded for the gratification of their wishes in this respect. We can testify to a degree of delicacy and unobtrusiveness in this particular, which should satisfy the most fastidious, if not the most uncharitable. Funeral services, in cases of deaths, are also performed by clergymen of any, and all denominations.

Medical and surgical services are furnished by the Medical Faculty of the University of Buffalo, and are gratuitously rendered.

Clinical instruction, as one of the beneficent purposes of public institutions of this character, not least in importance, enters into the enlightened policy with which this hospital is conducted. Students in attendance at the Medical College are permitted to visit the wards in company with the attending surgeon and physician at stated periods, on payment of a small fee, for the benefit of the hospital. Clinical lectures at the bedside, however, are not permitted, and, as we think, with great propriety. To comment at length on the diagnosis, pathology, prognosis, etc., of cases, in the hearing of the patient, is a custom which is revolting to humanity, and should always, in our humble opinion, be interdicted.

EDITOR BUFFALO MED. JOURNAL.

This Institution was opened for the reception of patients in August, 1848. Up to the 22d of August, two patients only had been received. Inclusive of these, from the 22d August to the 21st of February, 1849. (inclusive), the number of patients were *one hundred and twenty-one*. The number of patients received during the six months, respectively, are as follows:—

August, 14; Sept. 15; Oct. 18; Nov. 13; Dec. 25; Jan. 22; Feb., to 22d inst., 14; total 121.

Of the whole number, *sixty-one* were charity patients. For *sixty*, compensation was received, generally at the minimum rates prescribed by the regulations of the Hospital.

Nativity,—Americans	37.	Nativity,—English	02.
“ Irish	43.	“ Scotch	01.
“ Germans	19.	“ French	01.
“ Canadians	03.	“ Unknown	13.—121.

Sex—Males, 98; females, 23;—121.

Civil Condition—Single, 86; married, 16; widows, 23; widower, 1; unknown, 5;—121.

Diseases—Fevers, intermitting, 19; remitting, 2; common continued, or typhoid, 6; typhus, 3. Pulmo-tuberculosis, or phthisis, 7. Bronchitis, 6. Pharyngitis, 2. Pneumonitis, double, 2. Pleuritis, 2. Pericarditis, 1. Laryngitis, 1. Delirium tremens, 2. Enteritis, 1. Acute rheumatism, 2. Dysentery, 1. Dysentery, chronic, 1. Diarrhoea, chronic, 5. Nostalgia, 1. Epilepsy, 3. Anasarca, 1. Neuralgia, 5. Dyspepsia, 1. Melancholia, 1. Prurigo, 1. Psora, 1. Syphilis, primary, 1; secondary, 3; tertiary, 1;

consecutive, 1. Varicose veins and ulcers, 4. Ulcer, 2. Ophthalmia, 7. Corneitis and corneal ulcer, 1. Amputation of thigh, 1; of finger, 1. Hernia, 1. Rhinoplastic operation, 1. Onychia maligna, 1. Fractures, compound and comminuted of ankle, 1; of olecranon, 1; of skull, 2; of femur, 4. Contusion and sloughing, 1. Abscess, 1. Lumbar abscess, 1. Burn, 1. Enlarged tonsils, 1. Paraplegia, 2. Chronic inflammation of knee joint, 1. Lithotomy, 1. Impairment of intellect from injury of head, 1. Frostbite of ears and toes, 1.

Results—Recovered,.....60.
Improved.....26.
Not Improved,.....01.
Absconded,.....01.
Died,.....15.
Remaining,.....18.

The diseases in the cases terminating fatally, were as follows:

Chronic diarrhoea of long standing, three cases. In *two* cases, the patients were discharged soldiers who had served in Mexico. In the remaining case, the patient was moribund when brought to the hospital, and died in a few hours after entrance.

Pernicious intermittent, complicating colonitis, *one* case. Patient was picked up in the street, and brought to the hospital. Died second day after entrance.

Fever, continued, 3 cases. In *one* case, death occurred eight days after entrance. In *one*, death occurred sixteen days after entrance, patient entering late in the progress of the disease. In *one*, death occurred 41 days after entrance, from gangrene of lungs, succeeding sloughing of nates.

Pulmo-tuberculosis, 2 cases. Chronic pleuritis, 1 case. Paraplegia and Cystitis, 1 case. Pneumonitis, double. Patient entered in third stage of disease, 1 case. Amputation after injury by rail road cars passing over leg, 1 case. Fracture of skull, of right femur, and left lower extremity below knee, 1 case. Paraplegia from softening of spinal marrow, with Cystitis, 1 case.

The Directors are grateful to Providence, and to a charitable public, for having been enabled, thus far, to carry on an Institution, which, although yet in its infancy, they have reason to believe has saved the lives of many. They hope to be able to give relief to still greater numbers, when they have completed the works already commenced. The comforts of religion, when asked for, have been administered by Roman Catholic, or by Protestant clergymen.

BUFFALO, February, 1849.

ART. III.—*Sixth Annual Report of the Managers of the State Lunatic Asylum, Utica. Made to the Legislature. February 1, 1849.*

The Annual Report of the Superintendent and Physician of the Utica Asylum, presents the following statistics:—

Remaining at the close of the last year,.....	472
Admitted during year,.....	405

877

Of this number, discharged recovered,.....	174
" improved,.....	84
" unimproved,.....	38
died,.....	86

382

Remaining at the Asylum, Nov. 30th, 1848,.....	495
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The number of inmates during the last year was considerably larger than at any previous year since the institution was established.

During the months of August and September, severe dysentery and diarrhoea prevailed in the asylum, being prevalent, at the same time, in Utica and its vicinity. One hundred and ninety-five cases of dysentery, and twenty-seven cases of diarrhoea, occurred, making a total of two hundred and forty cases. Of this number, thirty-nine died—thirty-five of dysentery, and four of diarrhoea. The only son of Dr. Brigham, the superintendent, aged twelve years, a youth of great promise, fell a victim to the epidemic.

Dr. Brigham reiterates the advice given in his last annual report, not to transfer patients to the asylum too early after the development of insanity, particularly if the transfer requires a long journey. Mental derangement is frequently connected, at its incipency, either with inflammation, or intense erethism of the encephalon, and the fatigue and excitement of removal, under these circumstances, is extremely prejudicial, often leading to fatal results. Medical men, who are, or should be consulted in all cases of insanity as to the propriety of removal, will do well to bear in mind this caution. A few weeks' delay in any case of recent insanity, is unattended by danger. In puerperal cases, five or six weeks should elapse after confinement, before the patient should be taken from home. Dr. B. states that patients with puerperal mania have been brought, from a distance, to the Asylum, *two weeks* after confinement! This, if done under the sanction of a medical practitioner, is quite inexcusable.

The report contains the following statistical facts relating to *hereditary predisposition to insanity*:—

Number of patients who have been at the Asylum,.....	2,014
“ men,.....	1,017
“ women,.....	997
Known to have insane <i>relatives</i> ,.....	637
Number of patients known to have insane <i>parents</i> ,.....	273
“ men,.....	121
“ women,.....	152
Of the 121 men, the number having insane fathers, was...	64
“ “ “ “ mothers, was...	53
Of the 152 women, the number having insane fathers, was	67
“ “ “ “ mothers, was	80

And four men and five women inherited a predisposition to insanity from both parents.

Thus it would appear from our inquiries, and they have been very carefully conducted, that insanity is a little more likely to be transmitted by the mother than by the father, and that mothers are considered more likely to transmit it to daughters than to sons; while the fathers most frequently transmit it to sons.

Dr. Brigham submits a concise enumeration of his views respecting the *causes, prevention, and treatment* of insanity, to which we cannot do justice by any abridgement, and must therefore refer the reader to the Report itself, which, we hope, will be extensively circulated. He dwells with emphasis on the importance of a due amount of sleep in the prophylaxis, deeming morbid vigilance a condition which exerts a powerful agency in the production of insanity, when it concurs with a predisposition, or other causes. His remarks on this point seem to us to possess reasonableness and importance.

As regards the general management of the Asylum, we discover nothing in the present report calling for particular notice. The continued prosperity of the institution affords ample evidence of the ability and faithfulness of those to whom its management is entrusted.

BUFFALO, March, 1849.

ART. IV.—*Researches, Critical and Experimental, upon the Capillary Circulation.* By BENNET DOWLER, M. D., of New Orleans. Corresponding Member of the Academy of Natural Sciences of Philadelphia.

The composition of forces involved in the circulation of the blood, is among the subjects of physiology still shrouded in obscurity. Few topics, since the discovery of Harvey, now more than two hundred years ago, have occupied the attention of physiologists more than this, and the fact that it still affords an ample field for discussion, and hypotheses, is conclusive evidence that it involves problems not easily solved. It illustrates, indeed, in a striking manner, the intricacy and difficulty of the investigations of processes going on within the living organism.

As regards the circulation in the order of vessels situated between the termination of the arterial, and the commencement of the venous systems—the capillary system—our knowledge is especially defective. That there are forces incident to the capillary circulation, independent of the action of the heart, and which are capable of exerting considerable influence over the entire circulation, is, we think, apparent. The amount of blood which an organ, or structure, receives, is by no means determined solely by the action of the heart, and the calibre of the distributing vessels, but involves, in addition to these, the physiological condition of the organ, or structure, itself. Under different physiological conditions, an organ, or structure, will claim, and receive, different quantities of the circulating fluid.

For example, the gravid uterus contains vastly more blood than before impregnation, and this change, it is obvious, does not follow from a change in the general forces carrying on the arterial circulation, nor in a prior increase in dimensions of the uterine arteries. It proceeds from an increased force developed in the organ itself.

To understand the causes of the capillary circulation better than we do, is not alone desirable in a physiological point of view. The subject has very important pathological relations. It is connected more especially with the ultimate nature of the morbid condition which we call *inflammation*. The first, and most characteristic of the appreciable events belonging to the inflammatory state, is an increased supply of blood to the inflamed part, and this supply proceeds, evidently, from a morbidly developed attraction for blood in the inflamed part. Most of the sensible phenomena of inflammation, such as swelling, heat, redness, are due to the accumulation of an increased quantity of blood. They are but secondary results of that unknown dynamic, or chemico-vital perversion which gives rise to a greater

afflux of blood to the inflamed part than obtains in health. Now, if we were able to appreciate the dynamic or chemico-vital forces which preside over the normal capillary circulation, we have every reason to conclude that the true character of that pathological condition which involves an excess, or perversion of these forces, would be intelligible.

Nor is it likely that the pathological applications of a more intimate acquaintance with the physiology of the capillary system would be limited to a single morbid condition. All local diseases, involve, to a greater or less extent, aberrations of function in this order of vessels, and all would doubtless be better understood in proportion to the advance of physiological knowledge in this respect.

These few remarks are made by way of introduction to some extracts from a paper which appeared in the last number of the New Orleans Med. and Surg. Journal, from the pen of Bennet Dowler, M. D., the title to which is prefixed to this article. We do not intend to discuss any of the hypotheses that have been submitted on the subject to which the paper relates, nor to undertake any critical analysis of the latter. We have been much interested in the perusal of the essay by Dr. D., and his experimental researches on this subject are, to say the least, novel and curious. Under the impression that our readers will participate in the interest which we have experienced, we shall proceed, without farther comment, to make two quotations, which will embrace the larger portion of the entire paper.

As the title states, the researches are *critical* and *experimental*. From the portion of the paper which is occupied with criticisms upon several of the hypotheses more or less in favor with physiologists at the present time, we select his remarks upon *microscopical investigations*. We select these remarks, because they are quite at variance with the views now entertained by some of the most eminent physiological observers and writers, and it will be perceived that the objections of the author to the validity of appearances disclosed by the microscope, not only apply to inquiries respecting the capillary circulation, but, also, to other branches of physiology upon which that method of study is supposed by many to have already shed not a little light, and which promises still further revelations of importance. As respects the soundness of the considerations set forth in the following extract, we will not offer an opinion:

"As the capillary system belongs to Microscopic Anatomy, it will be necessary to dwell a few moments upon this aspect of the subject—a necessity, that I regret, not because my observations have been few, but for a different reason, namely, an extended monograph would be required

to place my views on this subject in such a light, as would enable me to indulge a reasonable expectation of escaping the charge of presumption, in dissenting from the highest authorities, not, indeed, so much with respect to the exact structure of the capillary vessels, (which is little known) but, in respect to other elementary points still more uncertain. For example, the globules of the blood, so often minutely described, pictured, classified, (as belonging to different animals) nay, absolutely anatomized, are probably, to a great extent, illusory. Air, or rather carbonic acid gas, so abundant in the blood, with no other anatomical membrane than that which envelope a soap or champagne bubble, would appear like globules—or these supposed blood globules may be heterogeneous liquids, having different densities, different affinities for each other, for the serum of the blood and for the surrounding tissue. Hence, upon the physical principle of homogenous attraction, the albumen, the fibrin, or the oily matters in the blood, would, like oil in water, assume the globular form. Besides, the microscopic analysis in the direct light of the sun, gives to blood and certain vascular tissues, a wholly new, different, and unvaried appearance. Of this method, I have much to say, but not on this occasion. I wish now, to be understood as referring to the usual degree of light, though unfortunately this important point remains without any standard of comparison, except the negative one, requiring the light of a lamp, or the indirect light of the sun. Passing by this source of illusion, the reader will be kind enough to read the following extracts, taken almost at random from a few books, lying on my table,—more would be tedious.

"Prof. H. Milne Edwards, represents the globule opened, dissected, and the flaps turned back! (*Anat. and Phys.* 25.) A microscopic object, would, of course, require a microscopic dissector, and microscopic scalpels! Dr. Golding Bird, in his account of Prof. Mulder's chemical physiology of the red coloring-matter of the blood, writes with apparent good faith, many passages like the following:

"The coloring matter is normally enclosed in a sac or cell composed of a thin membrane, consisting chiefly of protein, and capable of admitting of percolation through its walls under certain circumstances, although it generally retains the colored fluid it encloses sufficiently firmly to prevent its admixture with the serum. Within the sac is a nucleus of similar chemical composition to the membrane, and the whole thus organized, constitutes the *blood-disk*, *globule*, or *red particle*. The bright red corpuscles are always *biconcave*: in the dark-red blood, the corpuscles are *convex*, and the enveloping membrane is *much thinner*; they readily burst, produce exosmosis, emptying the sack, &c., &c.: On reaching the capillaries, the coating of oxyprotein is removed, the protein being employed for the repair of tissue, and the oxygen used for effecting the metamorphosis of effete and exhausted structures. The corpuscles losing their opaque covering, have their power of reflecting light diminished, their concave surfaces are lost, and the whole assumes a venous tint." (*N. Y. Jour. Med., and Lond. Med. Gazette*, 1845.)

Mr. G. Newport, in a paper read before the Royal Society, undertakes to define the corpuscles of insects, and other invertebrata, comparing them with those of man, and the vertebrata: He says "in the articulata the forms are first, the *molecules*; secondly, the *nucleated* or *oat-shaped corpuscle*; thirdly, the *spherules*, or minute rounded bodies developed from the

coat-shaped corpuscle, analogous to the free nucleoli of Valentin; and lastly, the *discs*, which are further developements of the spherules, and analogous to the true red-blood-discs of the higher animals.'—(Bulletin of Medical Sciences. 1845.)

'No single description (of the red globules of the blood) has talked with that which went before. Leeuwenhoeck believed that he saw them consisting each of *six well compacted, smaller globules*. Hewson believed that they were *bladders* which had within them *some* central body, loose and moveable; that often the central part might be seen *rolling* in its bag, &c. The Abbé Torre, said that these were not globules, but *rings*.'—(Bell's Anatomy and Physics.)

Dr. Carpenter calls the *globules*, '*flattened discs, having a circular form*.'—(Phys. § 570.)

Sir Charles Bell relies on the microscopic examination of the *foot*, for the proof of the capillary vessels. He says naively enough:—'We do not discover the coats of the vessels, but conclude that they exist, from the confined and certain course of the particles (of blood) which are in motion.'—(Anat. ii. 26.)

"Micrography envisages much which seems

"For man's illusion given."

Thus a convex or a concave surface, may, under certain circumstances, appear globular. The different elements of the blood, as air, water, fibrin, fatty matter, albumen, not to mention their probable form, possessing, as they do, different degrees of transparency, different densities, different degrees of shading power, of irritation, and more than all, different degrees of refracting force, would all conspire to throw doubt upon the anatomical accuracy of these microscopic membranes, and central nuclei, and the configurations which are too confidently proclaimed as absolutely characterizing the globules. Still more. Physical capillarity itself, would be illusory, that is to say, a portion of liquid, or several liquids in a capillary tube, would assume a concave or convex form, according to their wetting or non-wetting properties. These, and some similar facts, were forced on my attention, in making dried preparations between narrow strips or plates of glass; pressure and desiccation for a whole season, did not deprive many preparations of these globules of air, water, &c. Heat, instead of expelling them, often augmented their number, by expansion, at the same time giving fixity to their enveloping tissues.

I might adduce still farther argument from dead or physical chemistry, favorable to the doctrine here advanced, as to the globules of the blood being in all probability nothing more than one or several of the constituents of the blood taking the spherical form, as may be observed, out of the living body, without an organization high and complicated. I have observed with the naked eye, in the recently dead human subject, a rapid circulation or flow of chyle in the blood; the former had not yet fully mixed or combined with the latter, as will be seen in the sequel. Hence, this element alone, might be expected to assume the form of globules, without admitting anatomical sacks, nuclei, corpuscles, &c. The very pictures of these condemn them, on the physical principles of light. The centre is said and is known to be colorless, nay, luminous, if the globule be organized with red envelopes, the rays would be absorbed to a great extent, while upon the supposition that it is simply, like a drop of water, or oil, or like a double con-

vex lens, it would converge the light, so as to give a central luminosity corresponding with the pictorial representations. This piece of anatomy, this complete and sudden organization of the blood globule, considering the rapidity with which it is destined to pass through the minutest tubes, is, in a teleological point of view, very improbable, and must be, upon the filtering, wetting, or endosmotic theory of the circulation, somewhat unfavorable to permeation.

I do not deny that there are globules in the blood, but I deny that they are peculiar to it, since they appear to exist equally in every animal and vegetable substance which I have examined. But of all objects, they are the least likely to appear truly represented in the microscope either as to figure, color, or anatomical organization.

Color is an unimportant, and an exceedingly variable, not to say a deceptive element, in microscopic research. A very thin stratum of blood absorbs little, transmits much, and reflects almost no light in the direct solar ray. The so called red globules, may be absolutely colorless, though coloring matter near them, or in the axial line of vision, gives them a red hue, in the same way that a red curtain, in a room with a mild light, colors microscopic objects red? Are the peaks of an elevated mountain chain really *blue*? the clouds that shimmer in an autumnal setting sun, really *red*? a full moon in Indian summer, *bloody*? Are solar and lunar coronæ and halos, and the rainbow reflected and refracted from falling globules of rain, *real colorations*? The tissues and their enclosed liquids, differing in density, in figure, and in diaphaneity, might be expected, themselves, in some instances, according to position, to magnify like the microscope, and to decompose light like prisms, or falling rain drops, while on the other hand, absolute transparency in the object, renders it as invisible, and as structureless, as the air itself. Moreover, a dim light, at certain angles, throws enormously long, or very short shadows. One object rises above another, while the local point or field of vision, is always, if accurate, extremely limited; and, hence, diagrams and descriptions, however correct, explain little, where the thing itself is involved in an almost inextricable confusion, whether the fluids, or their containing vessels, be the object of research. For example, in the examination of fluids, I have observed a very striking, possible source of fallacy, namely, an apparently spontaneous formation of very regular capillaries, resulting from the desiccation of animal fluids. During this process, air, water, or some portion of the liquid, perhaps influenced by homogenous attraction, arranges itself at first, into river shaped channels, or tubes, with many branches, all of which contract more until they become fixed, while innumerable anastomosing connections join with other similar trunks and twigs, forming a net-work very like capillaries, though more open, and straight. Other fluids, in dessicating, form innumerable fissures; different, it is true, from the above, and from capillaries, but the tracks of these fissures correspond very closely to some portions of the net-work of capillaries, and may be even mistaken for them. Before I ascertained the fact, first mentioned above, I had concluded, erroneously, as to the quality of mucus expectorated by a patient. I found, as I supposed, capillary vessels under the microscope. There is, as I accidentally noticed, another possible source of error, in making capillary preparations between plates of glass, which though closely bound together, and kept in box, permitted, nevertheless, the formation of cryptogamous plants, (chiefly *Fungi*) of several kinds

invisible to the naked eye, but exceedingly beautiful in the microscope, having delicate stems, which by crossing each other's path, seemed to form a capillary net-work, among the tissues, and in other places. Their radicles and trunks, though extremely minute, are much more linear and uniform in size than capillaries.

I have examined hundreds of capillary specimens, both human and comparative, both wet and dry, healthy and morbid;—in the capsule of the lens, the hyaloid membrane, the iris, the retina, the choroid, the pia mater, tunica vasculosa, the serous, mucous, and other tissues in the principal structures of the human fetus as early as the second month; also in the beautiful, and highly transparent tissues of young alligators, as the nictitating membrane, retina, hyaloid, iris, mesentery, peritoneum, etc. But, *a priori* conclusions and conceptions were not realized; capillaries like regular rivers growing from thousands of tributaries—capillaries like arteries and veins, with thousands of ramifications, forming a regular and continuous net-work, were not seen with that uniformity, as to enable me (whatever others may have seen,) to draw a satisfactory conclusion, where a capillary vessel begins, where it ends, and what is its common direction. Isolated points, centres or reservoirs, are sometimes seen, from which capillaries radiate as if wholly independent, as if possessed of circulations within themselves. Again, a large, short canal, a spongy islet, or a stellated point, receives small vessels without any apparent outlet! The same may be affirmed of many regular arborizations, which seem as isolated as one spider's web is from another's. The capillaries, sometimes, appear rough, porous, and spongy;—conditions unfavorable to the perpetuation of motion generated in the heart. They enlarge and diminish irregularly—tap each other at every possible angle—form every possible curve, if not every possible figure.

"From the result of microscopic examinations, little doubt rests on my mind," says Prof. Jackson, of Philadelphia, "that a large proportion of what is regarded as capillary circulation, is not in fact performed by vessels. On the contrary the blood circulates out of vessels, but in currents. The currents of globules flow in every direction; I have seen currents of globules commence when none existed—pursuing every course with great diversity in their velocity, etc.—some in a retrograde course." (Princip. Med. 23.)

The importance of the microscope, cannot easily be overrated, in the revelation of minute objects, showing their outlines, organs, general conformation, and the *tout ensemble*, all of which are very striking in a moderate light; but, unfortunately, it fails to a great extent, exactly where, judging *a priori*, it ought to afford the most satisfactory results: for, in many instances, instead of drawing more clearly the lines of distinction—instead of showing, in a striking manner, the specific differences between tissue and tissue, between fluid and fluid, it reveals a closer similarity, a nearer analogy, if not identity. Thus when properly prepared, the fibres of muscles, fasciæ, tendon, pleura, peritoneum, arachnoid, sclerotica, etc., will appear so much alike, that the microscopist will often have to look at the labels to tell the difference: at least such is the case as to myself, and it is still more so to some of my friends. He who has a good eye, will probably distinguish certain objects, with it, better than with the microscope, as the difference between a muscular and nervous fibre, a nervous and arterial twig, etc.; whereas, the contrary rule, holds good as to infusorial organizations, and

multitudinous objects of a minute size, and of sufficient diaphaneity.

It appears to me quite impossible, to see, and describe, with anatomical accuracy, the capillary vessels, the circulation of globules, and their structure, or even the groups of organs in many objects called microscopic, not to mention entire animals, as large insects, the limbs of frogs, etc. Even the most delicate and transparent infusorium, is a great mass of tissues, piled one above another, presenting different results, at different perpendicular foci, and giving different appearances, with the increment or decrement of light, etc. Suppose that an entire frog, or man, in a transparent state, were placed in a microscope; millions of vessels will be found in the same field of vision, or in the same axial line, the one above the other, traversing each other in every direction; every change of glasses will present a new focus and a new phase, *ad infinitum*. It is probable that a life-time spent in this confused method of examination, would produce no satisfactory anatomical result. Suppose a thin layer of tissue is to be examined. Here, the chances of error are diminished, but they still exist—an object is selected, as a capillary. Is it a tube, a muscular fibre, or something else? For it is difficult to determine in the microscope, a solid cylinder from a tube. But, suppose a tube is found isolated, not one among many in the axis of vision,—is it a true capillary, a vein, a lymphatic, or an artery? How can its structure or coats be described, as some pretend to describe them, without first laying open this tube, in order to examine its different strata, upon an exact level? Who can do this, in an object invisible to the naked eye? It is not the experimenter, but the reader, with pictorial illustrations before him, that has clear conceptions of these things. Indeed, Schiller contended that the Ideal was always better than the Real. Thus, of morality and liberty, he says,—(he might have included Micrography):

If we test
By the *idea* of the good, the best,
How mean our efforts and our actions are!
* * * * *
Freedom is *only* in the land of *dreams*
And only blooms the beautiful in song.

The hesitating manner and the contradictory accounts of different authors, show that the anatomy of the capillary system is but little known. The micographers of the seventeenth and eighteenth centuries, investigated this subject with great industry and ability, and it is fair to presume that this part of anatomy is attended with great difficulties, since so little has been clearly established. Never were results more sterile, notwithstanding the grandiloquence of the day.

Beclard says, that "minute injections and microscopical observations soon lead anatomists to admit that instead of the supposed parenchyma interposed between the terminations of the arteries and veins, according to the ancients, everything in the body is composed of vessels; an opinion which yet divides all the cultivators of the science." "The capillaries are intermediate between the arteries and veins. It is in these vessels that, insensibly and without any fixed point, the arteries are converted into veins. However, the capillary vessels have been generally described as the last division of the arteries, rather than the beginning of the veins. Whether this be well founded, etc. the texture of the capillary vessels cannot be observed with the naked eye. These vessels have very thin and soft parietes,

invisible to the naked eye, and slightly visible with the microscope, very little different from the substance of organs, and also from the humors they convey. They seem rather formed out of the substance of organs than provided with its (their) own parietes." It would be impossible to stick the point of a fine needle without opening several of these vessels. Becard thinks it quite impossible to decide upon the existence of the colorless or serous capillaries on which much has been written. He adds,— "Doellinger thinks that the arteries, at their extremities, cease to have any parietes, and that the blood flows unconfined in the solid substance of the body. Wilbrand goes still further: asserting that the whole of the blood is converted into organs, etc."

Professor Carpenter's anatomical history of the capillaries does not seem embarrassed with any doubts whatever, though it bears on its face very little that can be called absolute certainty. He says that "the capillary circulation is carried on through tubes which have *distinct membranous parietes*;—originating in cells"!—in another place, he says that "the capillaries arise from a minutely anastomosing *net-work*, into which the blood is brought by the ramifications of the arteries on *one* side, and from which it is returned by the radicles of the veins on the *other*." (Physiol. 1848.) Cells! net-work! ramifications! radicles! one side! and the other side!

The Medico-Chirurgical Review, unwilling to allow the capillary system any share in vital phenomena, espouses "the Cell-Theory, as the greatest of all physiological discoveries! Every animal and plant is developed from a *nucleated cell*, by which all the organic tissues are formed, and by which nutrition, secretion, absorption, assimilation, growth, decay, etc., take place; all these processes are *independent of the blood-vessels*, being *extra-vascular*, as all accurate observers in every part of Europe testify." (See New Orleans Med. and Surg. Journal for 1844-5)

The micographical physiologists are now making great efforts to plant the tree of life in a "*cell*!"

A better type of life can be found in an animal never before described which, I have called, *the solar infusorium*, (because discernible only in the direct ray of the sun,) entering, as it does, like bricks into the cell wall, and into every other tissue. A Nilotic crocodile, supposed to have been dead five thousand years, is, to a considerable extent, composed of this animal, which springs into life, as soon as the tissue is sufficiently dissolved. I am fully able to show that the motion of this animal is not owing to evaporation, which, as I suppose, renders this discovery complete. This animalcule is very distinctly seen with a moderate magnifying power—a high power is too inaccurate. It is probable that it cannot be killed, certainly not by boiling, and the strongest heat short of combustion. (The latter, perhaps, only dissipates it.) These animalcules are all exactly alike. The *Vibriones* of Ehrenberg, Mandl, Mantell, and others, approximate the *solar infusoria*, but are essentially different, taking the descriptions and figures of these authors for a guide. The solar infusoria enter into, and constitute the chief material of the different tissues of every *infusorium* that I have examined. In all hard bodies they are, of course, motionless, until solution be effected. Whether they are the *ultima* of organic life, is uncertain:

"Great fleas have lesser fleas, and these were made to bite them,
And these fleas have lesser fleas, and so on *ad infinitum*."

In the quotation which follows, the reader is presented with nearly all of the portion of the essay which contains the *experimental* researches, together with the author's comments thereupon. The observations are certainly curious, and, so far as we know, original. They appear to demonstrate conclusively the independence of the capillary circulation, and, also, that this circulation does not cease immediately after death. The interest of the observations relates chiefly to the latter fact, inasmuch as the existence of forces inherent in the capillaries was already established. The results of the experiments, however, are valuable, as affording corroborative evidence that the capillary is not dependent on the general circulation.

"The experiments I offer, are all prepared by the hand of nature. They were observed, not *created*, by *artificial* methods. They are not taken from the *inferior* animals, but from *man*. This simplicity and naturalness, (so unlike the barren tortures of vivisection—the most unnatural thing in the world, except to show the natural history of agony), will no doubt be objects of derision to those who prefer whatsoever is complex and artificial, and, who, because the vital often *coincides* or *agrees* with the *physical* law, claim everything for the latter! The facts that follow, are not referable in their main features to any merely physical, or non-vital law. They are the last acts of vitality, before yielding complete and endless submission to the laws which govern the inorganic world—the prelude to the entire extinction of life.

"If these experiments shall prove nothing more than the doctrine of the independent circulatory force of the capillary system of man, they will have accomplished more in physiology, and in pathological anatomy, than most of the experiments made on frogs, with galvanism,—dignified with the name of *Electro-Physiology*, *Excito-Motory-System*, &c. It is true that these vivisections (often made at the expense of the State, and by salaried professors) have, in the estimation of certain persons, so great a dignity, from the State ceremonial, as to compensate for their otherwise worthless character—experiments, as remote as *possible* from man and his healthy and morbid conditions. It is difficult to see how yellow fever subjects can be slighted, since no disease presents an equal proportion of young, vigorous, and muscular persons. A hundred cadavera from this disease, will, probably, present to the sculptor a greater per cent of model forms, than a similar number of the army itself. Plants and frogs, endosmose and galvanism, (good in their way, but withal absolutely sterile,) ought not altogether to supplant *man*, and his *natural conditions*, as subjects of medical science, human anatomy and pathology.

In the experiments on post-mortem venesection, elevated points and positions were chosen, when practicable, in order to cut off all possibility that the result might be influenced by gravity; at the same time, care was generally taken that the orifices in the arm, forehead, external jugular, &c., should be elevated but little above the level of the highest part of the body, for fear that gravity might favor the result—which it always does to a very limited extent, at the first moment, though it makes the subsequent part of the experiment far more striking and brilliant. Sometimes, the elevation was taken, by pouring water on a plank, the latter resting on the body.

All the blood, at the moment, in the *distal* end of the vein, that is, beyond the orifice, would, if raised above the level, be discharged from gravity; perhaps an ounce or more, would, in some cases, thus be lost in emptying the vein, but then, *no more could get there*, to replace the *first*, unless, by a power altogether *different from gravity*. Hence, it appears, that all the blood, with this inconsiderable exception, after the *first moment*, flowed by capillary forces—without the aid of, or rather *against*, all that is called mechanical principles—against all the chemical forces incidental to respiration—against ganglionic forces, for the ganglions were often cut away—and always, without any aid from the heart. See, and apply, yourself.

1841. Yellow Fever. A man aged 34, died,—was brought immediately, &c.; a vein in the left arm was opened—the blood flowed freely—on moving the muscles, it jetted, and upon ligation, formed an arch of about eighteen inches in diameter, as in ordinary venesection. The left jugular being opened in the usual manner, bled copiously without jetting. The abdomen and chest, were opened without delay; one of eight or ten little twigs of nearly equal size, belonging to the coronary vein of the heart, was opened upon its highest point; the blood shot out in a small, strong stream, a pint being discharged in a few minutes. The omenta and mesentery, were beautifully and forcibly distended, especially in the venous vessels. The *cavas* discharged from three to four pounds of blood.

1841. Yellow Fever. A man aged twenty-five, died, lying on his right side—soon after, he was placed on his back—in which position, in fifteen minutes after death, he was opened. The liver, which was very brittle, was penetrated upon its highest convex surface; in a few minutes, three and a half pounds of blood were discharged. The blood was taken up from the abdomen, in a sponge, and squeezed out into a vessel and measured. A puncture with the *finger*, would not be likely to divide any large vein, nor even in the living state, produce much hemorrhage. The capillaries of the portal system, supplied nearly all this blood, so rapidly delivered from the abdominal viscera. (At the close of life, this man had nasal hemorrhage.) Those who practice anatomical injections, know that only a few ounces of wax can be forced into the vessels of the liver.

1841. A boatman, aged 32, of extraordinary size, muscularity, and weight—dead from Yellow Fever, one hour; the jugulars being opened, the blood shot upward—in a short time, a gallon, by estimation, was discharged. [The time is not precisely noted.] At two and a half hours after death, when the dissection began, about one and a half pounds of blood, (not included in the above,) had flowed from the orifices.

1841. An Englishman, aged 37, died while I was present, of congestive, erroneously diagnosed as yellow fever: in a few minutes, the body became extremely hot; the external veins, especially in the arms, distended, as in health, after exercise—two were opened—the blood flowed rapidly, projecting about one inch; by compressing the veins, and agitating the muscles, it shot out, a foot or more, clotting firmly, as usual. The arteries were empty. The *cavas* discharged about four pounds of blood. An hour after death, a fine, warm, natural sweat broke out on the face, neck and chest; a strong, febrile smell emanated from the body. (After death from *solar asphyxia*, [sunstroke,] I have seen the veins of the forehead, suddenly become prominent; the face, cyanosed.)

1843. Yellow Fever. A New Yorker, aged 26:—experiments, from

the third to the fifth hour after death. Room 80°; body in the axilla and stomach, 101°; * liver 102½°; thigh 100°; brain 85°; moderate rigidity. The veins of the forehead extremely prominent, to a degree rarely seen, when a man in health stoops to raise a great weight. A block placed under the back-head, raising the forehead higher than any other part of the body, caused, for a second or more, a recession of the blood, but it quickly distended the frontal vein as before. This vein was opened at its highest point on the forehead—a strong, but not a jetting stream, ran down the temple for about a quarter of an hour, discharging about twelve ounces of blood—after which, a rapid dropping, for a similar period, produced about four ounces more. The skin of the head, face and neck, which hitherto had been greatly congested, marbled, almost black, from blood in the capillaries, now became much more natural. During this venesection, an eye had been removed, and a thermometer thrust into the brain, and, also, the chest and abdomen had been opened, without any retardation of the current. It is supposed, that all the blood above the orifice in the frontal vein, subject to the flowing by gravity, did not exceed twenty drops. The orifice discharged nearly an ounce per minute—the original blood was replaced 24 times per minute—288 times in twelve minutes; or 1,440 times per hour—34,560 per day.

Here, it will be observed, is a large blood-letting, without a bandage or pressure. Can any bleeder, by this method, get half as much blood from this vein, in a living man?

It is remarkable, that all the external veins, those of the face excepted, were, in this subject, collapsed! Capillarity, in this region, alone, persisted for five hours. This man before death, had copious nasal hemorrhages.

1843. Yellow Fever. A Baltimorean, dead half an hour, was bled from the arm in the usual manner, the orifice being on a level with the highest part of the body—the blood jetted about two inches, but soon subsided to a rapid dropping. In thirty minutes, about six ounces were discharged. Contractility powerful—caloricity persisting; axilla at successive periods of 3 to 5 minutes, thus: 105°—106°—107°—107½°—etc.

1843. Yellow Fever. An Irishman, aged 33—dead two hours. The subclavian veins discharged several pounds of blood. Three hours after death, the left lobe of the liver bled profusely from an incision on its convex surface, made in taking the temperature;—an incision in the right auricle of the heart, discharged much blood. At four hours after death, the eyes still continued minutely injected. Air 61°—brain 80°; epigastrium 84°—left chest 80°—centre of the thigh 84°; contractility moderate.

1843. Yellow Fever. D., before, and for an hour after death, had minute and vivid injections of the eyes.

1842. Yellow Fever. An Englishman, dead ten minutes, was, after a few experiments on the muscles, opened. The peritoneum, omenta, mesentery, etc., had their minutest vessels, arterial and venous, distended, and bled freely when punctured. The cavae, etc., discharged, in less than an hour, from eight to ten pounds of blood, by estimation.

1842. Yellow Fever. Miss.—, aged 23; dissection, without delay. The omentum, mesentery, etc., distended with both venous and arterial

* For the sake of brevity, I will generally omit the experimental history of post-mortem caloricity and muscular contractility.

blood, in a manner difficult to describe, flowing freely from the smallest cut, in the higher, as well as in the lower organs. The subclavians, in a few minutes, discharged about three pounds.

1842. A German, aged 23—Yellow Fever—dead, thirty minutes. Twenty ounces of blood flowed from the external jugular, in half an hour.

1843. Yellow Fever. M.—, dead three hours—hot—blood oozing freely from a slight puncture, at an elevated point of the shoulder or deltoid region.

1841. Yellow Fever. An Irishman aged 35, dead 12 hours; a circular incision of the scalp, discharged in a few minutes, about six ounces of blood; incisions in the arms and legs bled freely; blood issuing from the ears; head elevated.

• 1841. Yellow Fever. A German aged 19, dead 30 minutes; a circular incision of the scalp, discharged forty ounces of blood in as many minutes; the head was elevated on a block.

1843. A supposed apoplectic, aged about thirty;—stout—unknown—died with apoplectic symptoms—dead one and a half hours*—heat at every two to ten minutes, in the order following:—axilla 91°, 89°; rectum 95°; thigh 92°; epigastrium and heart 94°; brain 88°; slight rigidity. Face swollen; dark red flush, as in erysipelas; pressure, as in this disease, caused the blood to recede temporarily, but it returned quickly, even in the highest parts of the head, face, etc. Incisions of the integuments of the highest part of the body, bled profusely; eyes injected for some time, say about two and a half hours after death.

I will here simply remark, without copying cases illustrative of the vascularity of the subconjunctival tissue, that real, active post-mortem injection, very different from the ecchymosed or infiltrated eye, takes place, or continues as it was before death, in considerable number of cases. As the body always rests upon the back, it disappears, of course, from gravity, as soon as the circulatory force is extinguished.

I forbear to detail cases, wherein the cadavera were not bled, though the tension of the veins, and congestion of elevated parts, often showed an existing, impulsive force,—an example of which, I observed in the person of S., two and a half hours after death from yellow fever:—1848. A slight incision on the tip of the nose, in this subject, discharged in a few minutes, four or five drachms of blood. Two days afterward, I met with another subject, which, half an hour after death, bled copiously, (as is observed, sometimes in the living body,) from the scarifications in cupping. The heart of this subject, removed from the body, gave unequivocal evidence of a circulatory capillary force, upon its exterior, as branches of the coronary vein, which were emptied by pressure, soon after became turgid again, in a manner inconsistent with gravity. The heart, of course, exercises no mechanical influence over the post-mortem capillary circulation. Nevertheless, I have experimented, in every conceivable way, upon this organ, with a view of ascertaining whether pressure might not accelerate the flow during post-mortem blood-letting. Nothing of that kind occurs.

* He was probably a laborer—was sent to the *Charity Hospital*, though among his rags, 45 dollars in gold and some other money, were found at the dissection.

If, however, there be blood in the arteries, it can be readily expelled, by previously opening an artery, as one of the mesenteries; I have, by a few artificial contractions, or rather compressions, spurted out to a distance, nearly half a pound of arterial blood. The removal of all the cranial, thoracic and abdominal viscera, does not arrest the capillary circulation in many regions.

The *quantity* of blood found in post-mortem examinations of fever-victims, is an important, and often a highly characteristic element in pathological anatomy, though it appears to have been almost wholly neglected; while on the other hand, nearly everything that has been said by foreign writers, of its *physical appearance*, (so far as the fevers of New Orleans are concerned) is remote from the truth. All that these writers say of the liquefaction, defibrination, putrefaction, etc., of the yellow-fever-blood, is unfounded; though, at the late periods at which examinations are usually made, such appearances are quite common. In no fever, perhaps, is the blood so natural, physically speaking, as in yellow fever. In yellow fever subjects, the *quantity of blood discharged* from the division of any great vein in the centre, as the subclavian, cava, etc., probably exceeds in a given time, the quantity from any other class of fever-subjects, owing, no doubt, chiefly to a greater quantity of blood, and a greater activity of the capillary vessels after death. I examined a subject in St. Thomas street, two hours after death from a tedious remittent, without seeing more than six ounces of blood in the brain, chest and abdomen; the most thorough dissection of every organ was made.

I will add only one more case.

1848. Serous apoplexy. The history, filling ten pages, will be slightly sketched. A stout man, aged 35, ate his breakfast as usual, and labored in the hot sun, until 9½ A. M.; the minimum of the day was 77°. He complained of indisposition, and on returning home, became insensible (as was supposed, from a stroke of the sun.) This was the opinion of his comrades. At 11 A. M. he died. The experiments began twenty-five minutes after death, and lasted one hour and thirty-five minutes before the general dissection. Contractility, too feeble to flex the fore-arm. Incipient rigidity. The thermometer remained 55 minutes in the axilla, without being removed; the first 5 minutes gave 105°;—5 m. 106¼°, 5 m. 108°; 10 m. 108°; 10 m. 108°; 10 m. 108°; 10 m. 108¼°; stationary; legs crossed—the knees 108°; perineum 108°; rectum 7 m. 111°;—5 m. 111°;—15 m. 110°;—epigastrium 189¼°;—middle of the thigh 108¼°;—chest 107°.

Great distention of the veins of the head, face and neck, with red flushing of the skin, was observed. A ligature was placed on the right arm; a vein was opened as usual; about two ounces of blood jetted from the orifice, after which, the blood trickled down the arm, and in the course of two hours, discharged, in addition to the above, about twelve ounces.

The skin of the face and neck was injected, dark, livid, and somewhat mottled; there was no cadaveric hyperæmia or injection of the dependent parts; the external jugular veins were distended as if ready to burst. Greater tension I had never witnessed in glottidian œdema, nor in convulsions, nor in the last throes of parturition. The left jugular was opened, as for ordinary blood-letting, *but no bandage or pressure* was used, the head

being raised, so that the orifice was nearly on a level with the breast-bone.* The blood jetted completely, without wetting the skin, forming an arch, the diameter of which, continued to extend for five minutes; at the end of 8 minutes, the arch had contracted, owing, apparently, to small clots on the margin of the orifice, and the skin having once become wet, the blood, without being materially diminished, ran down the neck, jetting occasionally on removing clots from the orifice. For about one hour the flow was copious, but, at the end of that time, was diminishing rapidly. I caught nearly three pounds at first, but as much of it did not jet out, but ran down the neck, I could only estimate the amount (which I did), at five pounds, or 80 ounces from the jugular alone. As the blood-letting progressed, the congestion and discoloration of the skin of the face, diminished.

Now it will be seen, that the orifice in the jugular did not discharge the blood as fast as the circulation replaced it—there was a surplus, because, the venous tension or jetting augmented for five minutes, and had not ceased during eight minutes. There was, as already mentioned, no bandage, or pressure. It is fair to presume, that it would be quite impossible in this way, to bleed a living man half as much, as collapse of the vein, clots, fainting, etc., would prevent it. Hence, the circulation in the veins was probably more active and persistent, than in health! Let it be supposed, that the upper or *distal* end of the jugular, contained one ounce, when opened—this being discharged, no more could replace it, only by a circulatory force. But here, the tube is filled 80 times in a few minutes. This may seem incredible from but one among hundreds of veins. A portion of this blood, however, was not derived from the distal but from the proximal end of the vein, as will be shown presently, by incontestable evidence. The explanation seems to be this: The capillaries filled the veins rapidly. The forces in the *cava*, contended face to face. The right side of the heart had no outlet. The equilibrium between the ascending and descending *cava*, was broken. The latter was weakened by the force or pressure turned off by the orifice, in the jugular. The pressure from below caused a retrograde movement—a very short one—towards the point where there was the least pressure, that is, the orifice in the vein.

While these experiments were being made, the cavities were opened. The heart contained but little blood.

In the early part of the experiment, particularly after the jetting of blood was changed to a stream down the neck, I observed, for a long time, that is, while the blood flowed, what then appeared to me an inexplicable phenomenon, namely, white, milky streaks, or soft flocculent masses, passing out of the orifice in the blood, rather swimming on the top of the current—a diffused drop or white flocculent cloud of this kind, was carried out once or twice every second. The subsequent dissection, fully explained this. The stomach contained nothing but water, of a sourish scent, with a few, very slender, tendinous fibres, apparently of beef, perhaps not amounting to five grains; but the quantity of chyle of a pale milky, white color, thinner than paste, in the small intestines, was very extraordinary. The

* This was ascertained by placing a straight or level plank on the highest points of the cadaver, and by pouring water on the plank. This body was also carefully measured, but no expansions, contractions, or elongations could be detected.

lacteals were gorged with this liquid,—the very same kind that I had seen passing from the jugular. I had, fortunately, opened the left jugular, near the place where the chyle is poured into the subclavian, so that it found an easy exit, along with the reflux current of blood, which latter, as before suggested, passed, or a part of it, in a retrograde course, proving, at once, the independent forces of the lacteal, and blood-vessels,—modified in this instance, however, by an important law of hydrodynamics, which changed their physiological directions.

This last case, (not to name others,) fruitful in physiological suggestions, shows that although life, in its popular or utilitarian sense, be completely extinct, several important sub-lives, in tissues, and several functions may survive for a considerable period, as manifested in the heat generating process, in muscular contractility, in capillary action, and in the chylous circulation. As the chylous force, so clearly proved in this case, goes to confirm, collaterally, a capillary force after general death, it may be proper to allude to the subject briefly.

Haller, the greatest physiologist of his era, ascribes the chyloferous circulation,—“first, to the attraction of capillary vessels—next to the peristaltic contraction of the intestines, and, lastly, to the alternate compressing force of the diaphragm. The attractions fills the villi, and peristaltic force empties them, and moves the chyle farther forwards. The rest of the motion seems to depend on the force of the membrane of the lacteal vessel *itself*.” (Phya. DOCLXVIII.) Here, several forces, altogether imaginary or inadequate, are invoked to do almost nothing, while the lacteals, *themselves*, do all the hard work by an *inherent force*. The latter hypothesis is the most rational, or, at least, the most simple, and is therefore preferable. Certain writers of the present day, without any physical proof, or analogy, assume the existence of *molecules*, which, as they further assume, perform all the functions of nutrition and capillary circulation. This is, to say the least of it, a very obscure and undefying explanation for professed *physicists* to make. The science of physics has developed no mechanical law or force analogous to the chylous.

Müller candidly acknowledges, that the powers by which the lymph and chyle are moved, are unknown. Sis Astley Cooper, in his work on the Thoracic Duct, details experiments showing that ligation of that duct in dogs, was followed by a rupture of the receptaculum chyli, by large extravasations of chyle, and by death, in a few days. This receptacle, though weaker than the duct, “is,” as he affirms, “able to bear the pressure of a column of quicksilver more than two feet in height. The force, therefore, exerted by the absorbents, must be greater than that of such a column; more especially when it is remembered that *living* parts will resist a force which would readily tear them when *dead*. The contractile powers of the absorbents are proved to be very strong—sufficient to rupture their coats.” (12) f

Another use of the above experiments, which I do not wish to dwell upon, is this: they completely overturn, as I conceive, the theory of Sir David Barry, namely, that the sole cause of the venous circulation, is a vacuum in the chest, caused by the act of inspiration, the atmospheric pressure causing the blood to rush into the lungs.

Endosmosis, or physical capillarity, (the physiological import of which has been already alluded to), like gravity, constantly acts upon the body and

its organs; but from its known laws, it appears not to be even an auxiliary to the chylous and capillary forces. In fact, it must from its *nature oppose* them in most instances. There is, however, a use of this doctrine which has been strangely neglected, and one which I do not now intend to point out at length, namely, a use in pathological anatomy. As the vital force sinks, the endosmotic rises. Thus in a few minutes after death, *exosmose* is very apt to take place from the gall-bladder. As the bile has a peculiar color, it is easily detected in the surrounding tissues. In some dead bodies there is no exosmose from the gall-bladder, until the beginning of decomposition; but in most bodies it begins soon after, nay, probably, *before* death—certain it is that in ten minutes after the extinction of life, large tracts of the peritoneal, or subperitoneal tissues, are often infiltrated and discolored with bile that has been attracted or transmitted through the gall-bladder.

Hence, endosmose and exosmose are fundamental considerations, if not in the healthy state, they are without doubt, during, and soon after death. An example that occurred this day, (Nov. 27th,) will illustrate the point. As others often refer to plants and frogs, I may be allowed to refer to crocodiles, a far more respectable animal. One of these having perished from cold, and I, not being able to complete the dissection on the first day, threw a wet cloth over the abdomen. The gall-bladder was much distended with bile, and was not wounded. But when I returned to the dissection, the cloth was green; the whole of the bile had left the gall-bladder. The latter was shrunk almost to nothing.

Dr. Mitchell, of Virginia, from 1737 to 1741, dissected, in all, five yellow fever subjects. Some of these were kept only "two or three days" before examination! (See Cox's Med. Mus.) One of these, a negress, served the illustrious Rush, as a "clue in practice:"—"the liver," he says, "in the above mentioned slave, was turgid and plump on its outside, *but* on its *concave* surface, two-thirds of it were of a deep *black color*, and round the gall-bladder it *seemed* to be mortified and corrupted." (Inq. iii. 90.) Now the "*clue*" to this "*black color*" and this "*seeming* morification," is found in the transudations of bile, and other changes consequent upon the delay in the autopsy; at least, a different appearance would be extraordinary.

It would be difficult to show, in the whole circle of medical sciences, any branch more important than pathological anatomy, and, yet, is there a single work extant, which, to a greater or less extent, is not based upon examinations vitiated by physical causes or changes, endosmosis being one? Excepting a few diseases, as cancer, consumption, the lesions of which are as strong as those on the field of battle, what can be learned of color, cohesion, congestion, vascularity, turgidity, effusions, infiltrations, &c., in acute diseases, as fevers, one, two, or three days after death? Magendie, the great vivisector, of Paris, thunders in the ears of his book-making colleagues, in this wise:—"Are you not in truth convinced, that the lesions found at our autopsies are frequently produced *after* death, and that consequently the plan hitherto followed in such inquiries is *fallacious*, and can only lead to *vague information and error*?" [Lect. on the Blood.]

In this paper, I have no wish, even had I space, to make any extended applications of these researches, to physiological and morbid conditions, although, deductions, fundamentally important, are involved in the same. The scalpel is truly the greatest, and most generally successful instrument

of pathological research, yet made known. But how little does it reveal in some cases of acute fever, particularly in the south, where lesions, merely secondary, or tertiary, are unfrequent? for in protracted fevers, positional lesions, doubtlessly, may form *internally* as they do *externally*. Congestions of the lungs, of the cardia and great curvature of the stomach, of the mesenteric glands, of the mucous membranes, &c., are sometimes, the result of position as much as bed-sores. I was called twenty-five miles, to see a young lady, (in Virginia,) affected with typhus, she refused all medicine; fell into a delirium for three weeks; the fever then declined, leaving a mortification of the back, from which she died three weeks after. Another young lady whom I attended daily for typhoid, during *one hundred days*, had, only a few days before death, the eruption of rose-colored, lenticular spots, described by M. Louis.

There is a constant bias, in pathological anatomy, leading to the centre, as the stomach, intestines, or some other central organs exclusively for the explanation of the cause of death, while, the circumference scarcely falls within the radius of pathological vision. Observe, in the early stage of yellow fever, what red flushings or capillary engorgement discolors the conjunctiva, the skin of the face, neck, and breast. As death approaches, this often is replaced by yellowness. After death, in those cases, where capillary action is most energetic, these same parts, occasionally, become much more engorged than ever,—flushed, livid, mottled, marbled, cyanosed, nay black, apparently tumid,—and this too upon parts the most elevated. Now this is as much a morbid appearance, as it would be in the cerebral or abdominal centres. This appearance is of easy explanation, upon the theory of post mortem capillary circulation. The heart discharges no blood. The capillaries deliver their blood into the veins,—these fill, as well as those large subcutaneous capillaries, that had suffered by dilation during the disease. It will be found, that as soon as the capillaries cease to act, the blood begins to gravitate; sometimes, subsiding like a water-line, or level; the higher portions of the skin, as on the cheek, forehead, tip of the nose, &c., become white. In cases where this capillary action is inconsiderable, and, in cases where it has ceased, the blood can be made to flow, and reflow, in a few seconds or minutes, by position, that is from side to side, by turning the body over; and, exactly, in those tissues where the engorgement was greatest during life, will the greatest degree of positional or gravitative engorgement be found after death. There is, however, a variety of *post mortem cyanosis*, due to capillarity, a blueness of the face, neck, &c.

Capillary hyperæmias, particularly of organs beyond sight, occur, short of softening, induration, and other phenomena characterising inflammation* in its extreme and concentrated conditions as met with in maladies less general. Now if the capillary circulation survives the general death, as it probably does, in some degree, in every case of fever, it is easy to understand, in acute hyperæmia, short of disorganization, how the capillaries, by filling up the great veins, emptying the arteries, and by altering the præ-mortem condition of their own vessels, may obliterate almost all traces of some of the most fatal morbid conditions—for inequilibrium in the circulation, is as fatal as cancer, gangrene of the lungs, or aneurisms.

* Professor Gross, of Louisville, in his able work on Pathological Anatomy, thus speaks concerning the seat of inflammation: "that this is in the capillary vessels is a fact concerning which there exists no dispute."—31

For reasons not necessary to explain, I beg leave to quote from Folio X. M. S. S., and from the *Western Journal of Medicine*, some dates and statements: (see my paper, *Post-Mortem Researches*, in the *Journal*; dated Jan., 1843. April No.)

November 13th, 1841;—at this date I find the following statement:—The capillary circulation in yellow fever, and other acute fevers, probably survives respiration, and the heart's action; when it ceases, cadaveric hyperæmia takes place.

In perhaps one-fourth of these dissections, the bodies were carried to the dissecting room a few minutes after death. The external veins, chiefly of the arms and neck, sometimes became distended—these being opened, the blood often flowed in a good stream—sometimes, shot out a foot or more; (that is, formed an arch having that diameter.) In some cases, by putting a ligature upon the arm, or by grasping it above the elbow, the blood was made to flow more freely, and, by moving the muscles, as the patient is wont to do in ordinary blood-letting, the blood shot out some distance. Punctures in the middle of the subclavian, discharged blood, which arose in a full stream, against gravity, two or three inches, forming, sometimes, an arch as it fell. The coronary veins of the heart, discharged blood rapidly, and with surprising force. I have observed within a few minutes after death, the flow of from twenty to thirty ounces of blood from the scalp, the head being raised. Prominence of the veins after death, is doubtlessly owing to the capillary circulation, which first fills the central, and then the external veins to excess: These dissections show conclusively the independent action of the capillaries. If capillary action exist independently of the heart, congestions, &c, may disappear, and others form during or after death, &c. Hemorrhage after death, &c. Post mortem blood-letting proves, that the heart's action is not necessary to the capillary circulation. The proofs are many, though they might have been greatly multiplied, had I taken a just view of this matter sooner—distension of the veins, copious hemorrhages, crimsoned flushings of the face, passed for nothing—not supposing it possible that the veins could discharge more blood than what they contained at the moment of death, nor that capillary life survived the extinction of the general life, as manifested in sensation, respiration, systemic circulation, &c. But, as soon as I had discovered the curious and complex laws of post-mortem contractility, the possibility of the doctrine of a post-mortem, vital capillarity, flashed across my mind. (Various co-ordinating phenomena were subsequently noticed, particularly, post-mortem calorificity, the laws of which are so peculiar as to constitute a distinct branch of thermotics.) Are not hemorrhages in yellow fever due to capillary congestion? &c. (Many other passages of similar date and import might be copied from the originals, which are open to any one.)

From the *Western Journal* I take the following extract, omitting the ten decided cases, each of which, proves the existence of the post-mortem capillary circulation: "The doctrine of the capillary circulation, as surviving that of the heart, and large arteries, renders tardy dissection a most fallacious guide in judging of venous congestions, vascular turgescence, organic reddening, blanchings, &c." "I may be permitted to say, that the following facts prove that the direct action of the heart, and its indirect or suction power joined to the suction produced by respiration, are not necessary to the rapid motion of the venous blood. To say nothing of cadaveric in-

jection and exudations, the transporting power of the capillaries might have deposited the blood in new situations, sponging it out from structures that had suffered during life from acute hyperæmia, engorging others that had been healthy, blanching the former, reddening the latter. At the right side of the heart, venous stagnation probably begins, its vessels being wholly passive. The capillary power is soon neutralized by an opposing mechanical force, or ended by an entire cessation of vital action."

I make these extracts for the consideration of honest Æsculapians, (these are not few) who are willing to give every man his due. If any one has ever before established the independent action of the capillary circulation in the living or dead human subject, if any one has applied this discovery, a fruitful one, in explanation of pathology and morbid anatomy, I am ignorant of the fact."

ECLECTIC DEPARTMENT, AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

Manual Delivery of the Placenta.—By J. BYRD SMITH, M. D., of Cincinnati.

The following is a portion of a communication in the Ohio Medical and Surgical Journal, No. for January, 1849:—

The method pursued by me, is during the expulsion of the fetus, as the fundus becomes emptied, to make, or cause to be made, firm pressure over this part of the uterus. By this means, we insure a uniform and efficient contraction of the latter, from above, downwards, with the effect of detaching the placenta from its connection with the uterus during the same pains which expel the child. This kind of assistance, first suggested by Dr. Murphy, I have made use of in some 15 or 20 cases, and have never been disappointed in the result; the placenta, on examination, being found detached in all of them. After giving the necessary attention to the child, I proceed to an examination of the uterus, and if not found contracted, it is grasped firmly with both hands, and the compression continued until it is felt to harden and recede within the pelvis. Without waiting for pains, steady traction at the chord is pursued, whilst at the same time, the hand is grasping the uterus externally. Friction over the abdomen, I consider, for reasons before assigned, as not only inefficient, but sometimes, decidedly injurious. The operation of grasping the womb, is as readily performed, and much more likely to accomplish the desired object. After thus manipulating for a few minutes, if the placenta does not descend, I direct an assistant to make sufficient pressure externally, to maintain the fundus of the uterus, in a proper position, and proceed to pass the fingers, and if necessary, the hand, into the vagina, for the purpose of stimulating the uterus to contraction. Sometimes, this alone, excites contractions, but if not, the hand, being conically shaped, is passed along the funis, into the uterus; this should not be done in a hurry, but slowly and carefully, so as to avoid inflicting injury upon the woman. The hand being passed beyond

the placenta, which will generally be found in the neck of the womb, grasps it. The increased volume of foreign matter in the cavity, is usually sufficient to produce immediate and efficient contractions, and the hand, with the secundines, will, in most instances, be forcibly expelled. If such is not the case, the hand containing the placenta, as much reduced in bulk by compression, as possible, is to be gently brought away; the assistant increasing the external pressure, as the womb is emptied of its contents. As soon as the placenta is removed, a bandage can be applied, and the woman made comfortable.

Remarks, by Editor of Buffalo Medical Journal.—The foregoing method of delivery of the placenta, we have practiced for the last ten years, or more, and had supposed it was peculiar to ourselves. Being at variance with the rules laid down by the best authorities in obstetrics, we have heretofore avoided any publication of our ideas on the subject; we have, however, been in the habit of expressing our opinion of the advantages of the practice in familiar intercourse with medical friends, but not, so far as we know, with the effect of its adoption by any of them. Finding, now, the same views enunciated in a communication by a respectable practitioner, we embrace the opportunity to state the results of our experience, which is much greater than that of the writer referred to, having extended over a period, of, at least, ten years.

The course which we invariably pursue, is as follows:—

Directly after the fetus is expelled, or delivered, and the funis severed, we grasp, with one or both hands, the uterus above the pubis, and excite its contraction, by manipulation with the fingers, through the abdominal walls, varying the degree of pressure with the tenderness over the abdomen, never, of course, using force enough to occasion much, if any pain. The uterus will be readily felt contracting under the fingers, until, at length, it becomes firmly contracted. We then intermit our manipulations, and, if convenient, it is well for an assistant to make firm pressure over the lower part of the abdomen. Next, seizing the funis, we endeavor to follow up with the finger to its attachment to the placenta. Often this will be easy, the placenta being entirely detached, and lying in the os uteri, or in the vagina. We never make much, if any traction of the cord; but if the placenta be not readily felt, we proceed, with but little if any delay, gradually and carefully, to insinuate the fingers, arranged conically, into the vagina. In this procedure, we never give pain; if the patient complain in the least, we advance more slowly, or not at all. But in the vast majority of cases, the introduction of the fingers, and even the hand, (if it be not of a large size) is unattended by suffering. Generally, the fingers introduced will reach the placenta, or uterine contraction will be excited, which will

bring the placenta within reach. If not, the hand is carried forward, provided no pain is occasioned. When the placenta is reached, we make careful efforts of extraction, hooking a finger over a portion of it, or plunging a finger into its structure. These efforts, and the presence of the hand, scarcely ever fail to excite contraction, and generally the necessity for continued manual delivery is slight—the accoucher has only to withdraw his fingers, or hand, before the advancing placenta, giving a little assistance if required.

The advantages of the delivery of the placenta in the manner just described, as it appears to us, are obvious. The patient is rendered comfortable, and in a condition to be put to bed, with less delay than when spontaneous expulsion is waited for. After the fetus is expelled, there is always impatience and apprehension if the remainder of labor be protracted: The patient is fearful of something wrong, and will hardly be quieted by assurances to the contrary. The delay is vexatious to all parties. There is less danger of hemorrhage after the placenta has been removed, and the uterus has firmly contracted. Certainly, the manoeuvre does not produce greater liability to hemorrhage. Since we have pursued the plan, we cannot recal a single case in which hemorrhage occurred to a degree to create anxiety. It is well known that when hemorrhage occurs, the placenta being retained, the most effectual method of arresting the flow of blood, is the manual delivery of the placenta. In those cases in which manual interference is required after waiting the length of time prescribed for the spontaneous conclusion of labor, the operation is rendered painful by the delay—the parts soon becoming sensitive and contracted. But directly after the delivery of the fetus, while the parts are greatly relaxed, and the sensibility of the nerves obtunded, the manipulation is wholly unattended by suffering, provided proper gentleness be observed.

The only objection which seems to us to require notice, is the license which it may afford for roughness and force; by those who will look only to the end to be attained, without observing the requisite conditions. These conditions are, that no violence is ever to be used, and no efforts made, or continued, which occasion pain. But this is an objection which will apply to almost everything excellent. Abuses furnish no valid arguments against what is good or useful if properly used; or, to speak more properly, the danger of mal-practice should not obstruct the advantages of good practice.

The Heart-Clot. By Prof. C. D. MERRIS.

To the Editors of the Medical Examiner:

GENTLEMEN:—I beg leave, through the columns of your useful periodical, to present the statement of certain opinions I have long entertained, relative to points in pathogeny connected with the occurrence of endocardial coagula; and I do so, because I consider them deserving of serious consideration by the practitioner.

These opinions are connected with certain points of practice or treatment that are, in many cases, indispensably necessary for the safety of the sick; and my sole desire in offering the communication is founded on the hope that it may tend to prevent some disastrous events, which the want of a little reflection might allow.

I believe it is a fact, not to be controverted, that in an animal slowly bled to death, the first portions of blood extravasated, coagulate less readily than the last portions. If this doctrine is true, it follows that the coagulability of the blood left in the vessels after great hemorrhages is augmented; I have had several occasions to find that it is dangerously augmented.

To take one of the most ordinary cases of hemorrhage—I mean that occurring after labor, or in abortions—we have an instance in which, even after the arrest of the bleeding, the patient is exposed to mishap from the coagulability of the blood remaining in the vessels. Loss of blood produces a tendency to fainting, or lipothymia; during an attack of fainting, the motions of the heart are enfeebled, the diastole slow—torpid, for the blood moves languidly in both the venæ cavæ, pours itself out in a slow current into the auricle, which it sluggishly distends, and sometimes is then instantly converted into a solid clot. If a clot be formed in the right auricle, it will also be formed in the *iter ad ventriculum dextrum* filling up the cone of the tricuspid valve; and the nucleus of it will cause the coagulum at length to occupy the cavity of the right ventricle, and extend itself to a greater or less distance along the tractus of the pulmonary artery. If the whole pulmonary side of the heart should be perfectly occupied in this way, the death of the individual would be instantaneous; and I doubt not, that many of the examples of sudden death, after delivery in hemorrhagic labors, are produced by the formation of cardio-morphous coagula, which form in an instant of a state of fainting, or lipothymia. It is understood, that the young Princess Charlotte, whose death at Clermont cast a mournful gloom over the whole British Empire, died within fifteen minutes after the birth of the princess, and that there was no very considerable hemorrhage, no laceration, nor other incident that might fitly explain the suddenness of her decease. Many women are known to perish in this manner. I have been the eye-witness of instances of the kind. I have also seen a very great number of persons, who appeared to me to be in danger of perishing in the same way, but who escaped a fate so deplorable. I am aware also of instances in which women, after considerable hemorrhagic losses, have been esteemed by their physicians to be what is called doing well, during a space of from one to seven days, but who afterwards becoming *instantly* extremely ill, have perished without remedy in from two to twenty days thereafter.

If a surgeon, desirous to reduce a luxated humerus, should attempt to do so, he might find the resistance of the muscular contraction so great as

to prevent his success, and he would therefore probably resolve to take away the resistance of the muscular contraction, by bleeding his patient *ad deliquium*. The surgeon knows that the deliquium would take effect upon the loss of a much smaller quantity of blood if the patient should be placed upon his feet in a standing posture, than if he were to recline upon his bed in a low recumbency. This ordinary practice is conformable with the dictates of experience in all cases of fainting, for it is well known that an individual will faint more readily in a vertical than in a horizontal position; and the first idea that is obvious to any medical man in a case of fainting, is this—that he shall cause the patient to be laid with the head very low, taking away for the time even the pillow. I have on many occasions, besides taking away the pillow, found myself under the necessity of elevating the foot of the bed by placing books or blocks under the lower bed-posts in order to favor the determination of blood to the encephalon; for I conceive that in all cases of fainting the brain has become oligæmic.

I may assert the opinion here, that fainting is oligæmia of the encephalon, and that a hyperæmia of the encephalic bulbs is the very converse of, and absolutely incompatible with the state of swooning. To raise up a woman who has within the few days past lost a considerable quantity of blood is almost inevitably to bring on deliquium. Now, if the idea be just that hemorrhage renders the remaining blood more coagulable, then it follows, that to take the woman out of bed, or to let her sit up in bed, is to expose her to the hazard of forming a coagulum in the right auricle, which, by extension of the nucleus, may fill the ventricle, occupy the aperture of the tri-cuspid, and pass several inches upwards in the course of the pulmonary artery and its branches. Monthly nurses, and ordinary attendants of the sick know nothing of these things, and they hesitate not, oft-times, to exhort or to permit the anæmical accouchee to rise and sit for a few moments for purposes that might be answered without quitting the horizontal position.

A lady was taken in labor in the afternoon. She sat in her arm chair all night without sleeping; at five o'clock in the morning she placed herself upon the bed, and the child was born in half an hour. The placenta was spontaneously and perfectly extruded, nothing being left in the womb; it was her fifth labor. Within an hour she had hemorrhage—the vagina and uterus contained large coagula which were turned out by the physician whereupon the hemorrhage ceased: she may have lost altogether some thirty ounces of blood. He remained near her for several hours. At mid-day, throughout the afternoon, and during the following night, she appeared to be perfectly well. At half-past nine the following morning the physician made his visit; she was without pain or the least indisposition, nor had she any symptoms, save those that appertain to the condition of a healthy accouchee. Her pulse was about 75 beats per minute; the respiration, temperature, and hue, satisfactory to the medical attendant; her complacency, physical and moral, was absolute.

The physician left her at 10 o'clock in the morning. Being summoned again, he reached her apartment at one, P. M., and found her in a state, which led him to suppose that she might be near dying. The pulse was 164 per minute, very feeble and thread like; the hands were cold, and the respiration was performed apparently by the strong effort of her will only. The respiratory acts were performed with great violence, and without rhythm. Auscultation of the heart disclosed a feeble impulse, with great irregularity

of the systolic action. She had lost no more blood beyond the ordinary lochial discharge; the vagina which was examined contained no coagulum.

When I came into the apartment at three o'clock, P. M., she supposed herself to be in a dying state and asked me if I thought she would live half an hour. It is difficult to conceive of a spectacle of more extreme physical distress than that presented by this dying lady. Every respiratory act was attended with violent pain referred to a place near the lower extremity of the sternum, as in angina pectoris. Palpation of the abdomen and questions relative thereto, showed nothing abnormal there. Upon retiring for consultation, I expressed to my medical brother the opinion that the pulmonary heart was filled with coagulum or false polypus; the prognosis, therefore, was necessarily fatal.

She had been left at 10 o'clock in the morning with a pulse at 75, and in the course of the forenoon she had been taken up from her recumbent position, and allowed to sit upon the close-stool for the purpose of evacuating the bladder of urine, immediately after which she was ill, and the physician sent for.

I made this diagnosis upon these grounds, viz: I said, there is no pathological principle that I know of that can explain the change of her pulse from 75 to 164, in so short a time, save that of a mechanical obstruction formed by a clot or tampon filling up the cavities of the heart. It is clear that there is no scarlatina, no variola, no fever of any kind—no attack of Asiatic cholera nor other malady, that is capable of making so soon, so great a change in the action of the heart as is here observed. The patient had hemorrhage yesterday, which has increased the coagulability of her blood; she was taken out of her recumbent position and placed upright in bed, whereupon she became suddenly ill in consequence of the coagulation of blood in her auricle, and there is no power that is able to remove this tampon from the cavity of her heart; it will destroy her as effectually as would a musket-ball deposited in the ventricle.

The respiration in this case, was carried on, at the time of my arrival, solely by the force of the voluntary power. There seemed to be no rhythmical respiration whatever; when she ceased to breathe by her volition, her respiration appeared to be suspended altogether. As might be expected, these voluntary aspirations were not rhythmical, but interrupted, uncertain, having long intervals. The blood that came up from the inferior cava and down from the upper cava, must have passed with great difficulty between the superficies of the clot, and the parietes of the heart. It must have moved in small quantities only through the tricuspid, and when distending the pulmonary ventricle, that ventricle could contain but a small portion of fluid blood, being mainly occupied by the coagulum. A similar difficulty existed as to the efflux of the blood along the pulmonary artery, which was tamponed at the time, with a cylindrical clot extending several inches along the vessel and its principal branches. Under these circumstances, the quantity of carboniferous blood entering the lungs by the pulmonary artery, for aeration, could be a small quantity only; hence, the violent, almost spasmodic, protracted efforts to aspire the air of the atmosphere; efforts, which, however great, must measurably fail for the purpose of abolishing the direful sense of pulmonary oppression, or respiratory distress, or, to use a more concise term, asphyxiation. The quantity of blood

in the lungs, was too small to receive the endowment of oxygen which is requisite to preserve any individual from a feeling of suffocation; and however thorough might have been the aeration of the small quantity that was there, however brilliant and florid may have been its arterial hue after being breathed upon, the quantity of oxygen imparted to it, must necessarily be insufficient so to act upon the nervous mass, the neurine, as to hinder the conscious principle from perceiving the sense of asphyxiation. With a heart situated in this manner—with the utter impossibility of thoroughly oxygenating the sanguine mass, the innervation gradually fails—a failure which is manifested in the decadence and ultimate overthrow of the various functions. All the functions are but the expressions of the biotic force that is sent down by the encephalic bulbs and spinal cord to the distal points of the nerve-fibrils in the organs. Every acinus of a gland is alive solely by the nervous force which comes into it by the fibril that connects it with the nervous mass, to obey whose mandate, is to live, while to fail of receiving it, is command to die; the same is true of every part and particle of the histological constitution.

As the encephalic bulbs certainly cease to irradiate the organs when they themselves cease to receive through the oxygeniferous streams injected into them by the carotids and vertebrae, the supplies of oxygen which alone enable them to evolve the life force, the nerve force, the *lebenskraft*, the biotic force—it follows, that the organs die in the same ratio as those bulbs fail and perish.

One is not surprised, therefore, upon observing, that a person in good health, like this unfortunate lady, the right side of whose heart becomes suddenly, instantaneously tamponed by a coagulum, should fall a victim, and that speedily, not to the presence of the clot alone, but to disease developed in other parts, whose life is overthrown in consequence of the obstruction of the prime organ of the circulation. Only a few hours could pass, with a large coagulum in the heart, before the pericardium would begin to be filled with serum, or the embarrassments in the pulmonary circulation, seek in vain for relief, by pouring out a vast effusion of water into the cavities of the pleura; or the innervative force being withdrawn from the viscera contained within the abdomen, whose venous blood is prevented from flowing off through the pulmonary artery, there is set in motion in the peritoneal sac, a tide of effusion, filling it up in the course of a few hours.

In all such cases as those of which I am speaking, the escape of the blood from the venous side of the sanguine circle, is retarded, with the effect of producing enormous engorgements of all those venous branches, which usually and readily allow their products to run off through the ascending and descending cavæ. Let the reader perpend for a moment, the condition of that portion of the vascular system which receives aortic injections by the cæliac and the superior and inferior mesenteric arteries; let him reflect that the whole of this torrent, which is entirely expended upon the chylipoietic and alimentary organs, is first collected by the capillary radicles of the portal vein, then distributed again among the capillary termini of the hepatic porta, whence it is a second time collected to flow off by the hepatic veins. Now, if the auricle and ventricle are tamponed by an endocardial coagulum, this whole torrent is inevitably arrested, and the cavities become immediately engorged by the continued injections from

the aorta, leaving no grounds of astonishment as to sudden or fatal derangement of the healthy states of the tissues that are developed by it:

The time required for extinguishing the life of the sufferer is a variable time; one relative to the magnitude and extent of the coagulation. I can imagine, that in the case of the Princess Charlotte, already alluded to, a coagulum was formed which filled the heart so completely as to put an end to its action within fifteen minutes after the birth of the princess. My patient above mentioned, lived forty-eight hours after the occurrence of the accident, during which time, she suffered the most inexpressible respiratory distress. She filled her pericardium with serum, while her peritoneal cavity became also the subject of a great effusion. Upon examining the heart twenty-four hours after her decease, one might feel surprised that her life could be so long protracted, since the auricle, tricuspid and ventricle were completely tamponed with a clot which was not an enthanasial clot, but consisted apparently of a firm, whitish-yellow mass of fibrine, out of which, every particle of hæmatoglobulin had been washed away, or expressed. An enthanasial clot is, in my opinion, necessarily a red one; a pre-enthanasial one ought to be white.

A patient in this city was delivered early in the morning. Soon after the birth of the child and the delivery of the placenta, the physician descended to the breakfast room, having given strict charge that the patient should preserve the recumbent position, and be kept quiet. While at his breakfast, cries from the top of the stairway, called him, for 'God's sake,' to hasten to the assistance of the patient. In a moment he was at her bed-side, where he found her already dead, having fallen backwards across the bed, with her legs hanging over its side. He was told that she had said to her nurse, 'I wish to get up,'—'the Doctor says, madam, you must not get up, if you please.' 'But I must get up, I will get up.' She threw her feet out of the bed, and rose up, sitting upon its edge; her head reeled to and fro, and she fell back and expired. No examination was made of the dead body, but I ask the reader to explain the cause of this sudden death, otherwise than by the rationale that her heart ceased to beat because it became instantly filled with an immovable clot.

Man cannot die, save by the cessation of activity in the brain, or in the heart, or in the lungs: he lives within this triangle, and can only escape at one of its angles. He must die by the brain, or by the heart, or by the lungs. It is to the last degree improbable, that this woman perished solely because her brain ceased to evolve; but if it did not *instantly* cease to evolve, it must have continued to be the cause of motion everywhere. If the heart, as I suppose, became instantly filled with congealed blood, so that it could no longer receive nor discharge any portion of that fluid, the nervous mass would cease to live as soon as it should have consumed all the oxygen contained within its capillary vessels at the moment of the arrest of the cardiac circulation. The patient died by the heart.

A lady was confined in a natural labour, giving birth to a healthy child, at term. She lost a considerable quantity of blood at the time of the extrusion of the placenta, which left her feeble and pale. Her physician directed her to be kept quiet. She had a good day, and following night. At the morning visit, the physician found her comfortable, and her condition was satisfactory to him. Soon after he left her apartment, she was seized with violent, alarming illness, whereupon he was recalled, and was

again present after the lapse of about an hour. Her pulse was extremely frequent, feeble, and small; it continued frequent until the moment of her death, which took place about the nineteenth or twentieth day. On the eighteenth day, I think, I saw the lady, and formed the opinion that she was perishing on account of a false polypus, clot, or tampon in the heart, established there by the imprudent, early uprising after a hemorrhage. After her death, a great quantity of water was found in the cavity of the right pleura, while a firm, white coagulum, entirely destitute of corpuscles, was detected in the right auricle, filling up very much the cone of the tricuspid, while the ventricular end of it seemed to be torn or threatened to pieces by the cordæ tendinæ, which, during so many days, had been vainly occupied in the endeavor to demolish it. The filling up of the pleura with serum, was a natural consequence of the condition of the respiratory organs, quite as much so, but not at all more so, than was the filling up of the peritoneum and pericardium in the former case, consequences of the arrest of the circulation in the cava and its branches.

Towards the end of the year 1848, a primipara gave birth to her first child. She was tall, very slender, and delicate; the placenta was not removed; she lost a good deal of blood. Between forty and fifty hours after the birth of the child, upon being called to her succor, I removed the placenta from the cervix uteri in which it was grasped and detained. I removed it with the index finger of my right hand. The stench of it was noisome to the last degree. The putrid odor of it remained upon my hand for twenty-four hours, notwithstanding every effort to remove it. The patient was pale, and her pulse somewhat frequent, presenting the usual characteristics of the anæmical pulse. On the following day she was comfortable; the milk was secreted, the lochia healthy, and she was doing well, though still very pale. On the seventh day, she was placed in a chair, before the fire, sitting up: she immediately felt sick, was put to bed, and I being called in to see her, told her friends that she had formed a fatal coagulum in the heart. She lived about forty-eight hours after the accident; I did not examine her body. I leave the reader to judge whether my diagnostic was or was not probably correct. She had a pulse upwards of 160—the impulse of the heart feeble—the respiration disturbed—frequent.

On a great many occasions, since I have been a practitioner of medicine, I have been called to see patients, who, after hemorrhagic labors, have disobeyed my injunctions as to horizontal rest, and, who being prematurely lifted upright in bed, had fainted. I have not a doubt, that among those of these persons in whom I found the heart fluttering, irregular and feeble in its action, on my arrival, incipient coagulation existed. I have thought as I entered the room of a patient, that her auricular blood had begun to thicken, but was driven out from the auricle before its thorough coagulation, in consequence of the startling effects of a dash of cold water upon the face, or of clapping the hands, or snatching the pillow from under the head and shoulders, allowing the head to fall so as to favor the restoration of its vascular tension or even hyperæmia, and thereby re-establishing the perfect and powerful extrication of its innervative force. The re-excitation of the innervative force of the brain would probably soon enable a heart so situated, to discharge itself of the inchoate coagulum.

It is not needful that I should draw out this paper to any great length;

nor that I should discuss the reasons why so many autopsies present the evidences of the endo-cardial clot of which I have spoken, without having excited in the mind of the attendant practitioner, the suspicion of its presence before the death of the patient. It appears to me, to be enough for the present occasion, to propound the question, can a patient with a white clot in the auricle and ventricle recover? If such a clot be a small one, the pulmonary circulation, although checked, is not necessarily suspended, but the nucleus of such a clot, like the nucleus of an urinary calculus, tends constantly to increase in size, and hence, a small coagulum, which strangely disturbs the action of the heart, may consist with a considerable protraction of the struggle against its fatal power over the circulation. The gradual augmentation of the volume of the clot, and its extension into the pulmonary artery and its branches, must, in every case, lead to an inevitable dissolution. I have not the least confidence in the power of alkaline medicines to dissolve such coagula, nor do I admit that the dull white, endo-cardial coagulum, so often discovered, is the result of a state of endo-carditis; but I rather attribute its occurrence to a temporary stasis, or near approximation to stasis, during a state of fainting in an exhausted patient. Its occurrence after hemorrhagic labors, or upon the almost total suspension of the circulation at the cessation of an attack of puerperal eclampsia, ought not to excite surprise. If a coagulum should fill the auricle and the tricuspid valve completely, and at once, the death would be almost instantaneous, and the clot would be found red. If the process of its formation should be long protracted, it would be dull white.

I did not design in this paper, to speak at all of the enthanasial coagulum; it is perhaps quite normal that some portions of the blood last reaching the heart, at the moment of death, should congeal there.

In regard to the diagnosis of cases in which the endo-cardial coagulum becomes suddenly constituted, as in the examples of which I have spoken, it appears to me that the medical observer, in order to make it, must resort to a method which is only to be fitly characterized as transcendental diagnosis. It is true that the feeble impulse and almost complete suspension of the sounds of the heart, might serve as a quasi physical diagnosis of how-ever little value.

By transcendental diagnosis I mean one made by a process of the mind, fitter to be called sentiment or conviction, than a regular ratiocinative progress.

To enter an apartment one has quitted only half an hour before, and to find a patient hopelessly ill with signs of imminent death, yet who had no serious symptoms of illness before—to find her making desperate voluntary efforts to breathe, without any signs of laryngeal or phrenic or pulmonic inflammation or accident—to see the face pale and ghastly—to observe her conscious sense of impending asphyxiation from loss of oxygen—without the leaden or idiotic hue of a general cyanosis. These are the grounds of a diagnosis which may be called transcendental, one in which the consciousness of the physician informs him that a mechanical obstruction within the heart exists, and that such an obstruction alone can give rise to the phenomena.

In all the lingering or sudden progressions of the accidental disorders supervening in endo-cardial coagulum, no purely cyanotic manifestations have met my observation.

Writers on cyanosis mostly refer the cyanotic symptoms to the backing of the carboniferous blood of the veins into the capillaries. You, Messrs. Editors, are aware that I have maintained the opinion that cyanosis is, in its essence, not blueness of the surface, but a state of the nervous mass produced by the absence of oxygen in the brain-capillaries.

The writers, and among them, perhaps in chief, Professor Rokitsansky in his *Pathologische Anatomie*, contend that cyanosis depends most commonly upon constriction of the orifices of the great vessels of the heart, preventing the venous blood from escaping from the caves by the routes of the heart. Now, I aver that no obstructions existing in the vessels of the heart can be more complete than that depending upon a large endo-cardial clot, or tampon; and yet I venture to say, that under circumstances of such kind the victim perishes without manifesting the peculiar livor or cyanotic tinge which characterizes the forms of the malady, that are connected with open foramen ovale and imperfect action of Botalli's valve. It is my clear conviction, that as long as the respiration can be carried on in endo-cardial clot, the blood, however small in quantity, that reaches the lung passing along the superficies of the clot, is highly charged with oxygen. While, therefore, oxygeniferous blood continues to reach the brain, the patient, though conscious of the want of oxygen in due quantity, is in a state different from that of one who injects only carboniferous or venous blood into the neurine of the encephalon.

My intention was to speak only of the white clot, the false polypus, to show the probability of its being formed under circumstances of deliquium, in the oligæmia that follows uterine hemorrhage; and thereupon show how dutiful a thing it is on the part of the attendant physician, to issue the clearest and most precise orders as to the guidance of the hemorrhagic accouchee. I believe that a woman who has lost a very great quantity of blood, and who is prematurely taken out of her recumbent decubitus, and placed upright upon the close-stool; whether in bed or not, incurs a most dangerous risk of a miserable and premature death, from the sudden formation of a heart-clot.

I am gentlemen,

Your obedient servant,

CHARLES D. MEIGS.

Bellevue Hospital.—The newly finished and very convenient operating theatre, and clinical lecture room of this Hospital, was formally opened and dedicated to the united interests of science and humanity, on Friday, March 2d. 1849. The occasion called together a large number of practitioners, and a large proportion of the students of both schools, with a few intelligent medical friends of the institution. Among the latter, we observed with pleasure, several members of the Common Council, and gentlemen connected with the press. Among the medical gentlemen, besides those connected with the Hospital, we noticed Professors Smith and Watts, of the College of Physicians, Dr. Bulkley of the New York Hospital, and others.

When the audience had assembled Dr. Manly, President of the Medical Board, introduced Dr. Reese, the Resident Physician, who, at the request of his colleagues, had agreed to deliver an address on the occasion—and

well did he perform this duty! After general felicitations on the happy occasion, he proceeded to point out the various and important reforms which under the supervision and with the sanction of the Honorable the Corporation, he had been able to perfect. Among these, he dwelt with earnestness and satisfaction, on the change of nurses, a change which had forever banished from the bedside of the sick and dying, the vagabonds and prostitutes from Blackwell's Island, to whom, by a most mistaken notion of economy, he had been formerly restricted in the selection of his nurses. This reform, equally important in a moral as a medical point of view, is now completed, and the Resident Physician may well felicitate the corporation and his associates, on this most auspicious change. All that was expected from it has been more than realized. He next spoke of the advantages derived from the change of locale, from the old, dilapidated buildings, to the present large and commodious hospital, the wards of which, now by recent changes, were made to compare very favorably with those of the best hospitals of our country.

He next spoke also of the facilities for clinical instruction, by a reference to the ordinance passed so far back as 1839, proved that the idea of clinical lectures had been ever present in the minds of the corporation. He showed that by various acts since passed, that this idea had never been lost sight of, and that the policy had always been to open wide the doors of this hospital to the profession, to make it subservient to the cause of science, and thus contribute to the general advance of medical education. He alluded to the various obstacles by which the realization of these truly patriotic and enlightened views had been delayed, and congratulated his hearers on the final removal of these obstacles by the reorganization of the hospital, and the appointment of a board of visiting physicians and surgeons, selected with reference to professional character only. Thus had an intelligent body of non-medical gentlemen, carried out the views recently expressed by the national medical convention, viz., that all public hospitals should be opened to professional men and students, because in the wards of hospitals only, can clinical instruction be given, and without clinical teaching, there can be no sound medical education.

And now, continued Dr. Reese, that this commodious hall has been set apart, dedicated to the advance of science and the alleviation of human suffering, we shall proceed to give a practical illustration of the benefits to be derived from our improvements, by giving you an opportunity of witnessing one of the most severe and important operations in surgery, as a pledge, that hereafter the manifold advantages of the institution should no longer be confined to the medical men officially connected with it, but, in the accomplishment of the noble design of the city government, be enjoyed by the profession at large. Dr. Reese concluded his remarks amid expressions of applause and satisfaction by all around.

Dr. Van Buren, one of the visiting surgeons, and the operating surgeon of the day, then exhibited a specimen of Encephaloid disease of the stomach, and having made some remarks on it, proceeded to state that the patient on whom the operation of lithotomy was about to be performed, was in an adjoining ward; and that before his introduction, he would be placed in a state of anesthesia by chloroform, as this possessed decided advantages over the usual mode of bringing the patient in an excited state before the audience, and then proceeding to administer this agent.

He quoted a passage from Prof. Miller's Lecture on Anesthetics to support these views. The patient, an old man, (67 years) was then brought in, perfectly insensible, and Dr. Van Buren proceeded to the operation, which was performed with skill and crowned with the most complete success. The patient was kept insensible by a continued use of the mixture of chloroform and ether, administered by Dr. Metcalf. On examining the stone, (a soft specimen of the amoniaco magnesian variety) it was found to have crystallized around a head of common grain—either rye or wheat. The presence of this foreign substance in the bladder could only be explained by supposing that it had been used to stimulate the urethra to produce onanism. Another melancholy example of human depravity and its punishment!

Dr. Mott made a few remarks on the operation while it was in progress. Dr. Reese then announced that one of the visiting physicians would next week deliver a clinical lecture in the hall, and that such instruction would hereafter be continued.

After this the assembly separated, evidently much gratified with the entire proceedings, as well as with the prospect of the future benefits to be derived from the clinical teachings, &c., of the hospital.

We cannot better close our account of this interesting day, than by the following extract from the Commercial Advertiser—it speaks, we have no doubt, the sentiments of all the more intelligent members of our community:

"We think we have cause to congratulate the public that this hospital has attained its present elevated position, under the able supervision of the medical gentlemen connected with it; for, from this great practical school of medicine and surgery will be sent forth, to fill the ranks of their noble profession, men eminently qualified to discharge faithfully and efficiently their responsible duties in whatever community they may offer themselves for the patronage of the people. And far distant be the day when political favor or censure shall do aught to dam up the stream of advantage to suffering humanity which has been thus so happily and successfully opened."

P. S.—On Friday, 10th March, the operating theatre was crowded with students and practitioners, who were much interested in a Clinical Lecture on Chronic Pleurisy, by Dr. Metcalf; after which, Dr. Van Buren amputated the arm of a man whose wrist and hand had been rendered useless, and a source of constant irritation by phlegmonous erysipelas. Dr. V. B. preceded the operation by some remarks on the necessity which compelled him to perform it—"under no other circumstances, is an amputation justifiable. We should always remember that resorting to the knife is an acknowledgment either of our own ignorance or of the impotence of our art. We cut off the limb, only because we cannot cure it."

After the operation—during which the patient was under the influence of chloroform—Dr. V. B. announced that the old man on whom he operated on the third instant, was doing well. Dr. Reese gave notice that a Clinical Lecture would be delivered on Friday, 17th, and probably an operation, lithotomy.—*Annalist.*

Dr. Parker's Clinique; College of Physicians and Surgeons. March 5, 1849.

Case 1st.—Boy, aged 7 years, with strumous or scrofulous conjunctivitis.

Dr. Parker remarked that this case was important as illustrating a particular form of ophthalmia—one, too, in which accuracy of diagnosis is all important, in view of successful treatment. Indeed, remarked the doctor, we have with the eye, as with the ear, too little careful discrimination in regard to the different forms of disease which affect its various structures. If called to a patient with redness, heat, and pain in the eye, the physician is too apt to pronounce it *ophthalmia*, and make out his prescription, without the least inquiry into the question, whether the inflammation is located in the conjunctiva, the sclerotica, the iris, or any other of the structures of the eye. And as little do they inquire whether it is catarrhal, scrofulous, rheumatic, or syphilitic in its character. On this account many blunders are made in the treatment, and many eyes irretrievably lost. In the case before us, we have an enlarged and congested state of the vessels of the conjunctiva, forming a net-work over the whole surface of the eye-ball except the cornea. There is some intolerance of light, and the pain is of that smarting, rough character which likens it to the pain arising from sand or dirt in the eye. The lids are agglutinated together in the morning, showing the existence of *lipitudo* or disease of the Meibomian glands. There are also some small pustules, near the base of the cornea, which if allowed to go on, would, doubtless, lead to small irritable ulcers. The disease in this case has continued eight or ten days, and affects both eyes. It is of a sub-acute character. From inflammation of the sclerotic coat, it is distinguished by the character of the redness and pain. The vessels in scleritis, instead of showing a prominent net-work, as in this case, seem to radiate in lines from the base or edge of the cornea, as from a centre, are less prominent, and more nearly of a brick-red color. The pain in the eye, is deeper seated, and like rheumatism, most severe at night. From simple catarrhal conjunctivitis, it is distinguished by the general scrofulous aspect of the patient, by the greater intolerance of light, and especially by the pustules already alluded to. These latter are characteristic of the scrofulous ophthalmia.

Treatment.—This must depend entirely on the stage and character of the inflammation. In this case which is sub-acute, of several days continuance, and presenting evident marks of scrofula, the treatment should be mainly constitutional; 4 grs. of calomel, or 6 grs. of pilulæ hydrarg., given at night and followed in the morning, by rhei and soda, sufficient to operate moderately on the bowels, followed in two or three days by small doses of the iodide of iron, or of bi-chloride of mercury dissolved in tincture of cinchona, would, doubtless, speedily effect a cure. Locally, a collyrium, composed of

R. Rose Water ʒi.
Sulph. Zinc 4 grs.
Vinum Opii 80 gtt̄s.—Misce.

dropped into the eye two or three times a day, and an ointment composed of Unguentum Hydrargyri nitratis, largely diluted with rose ointment, applied to the edge of the eye-lids every night will generally much facilitate

tate the recovery. In cases of a more acute character, local bleeding may be necessary in the commencement.

The strength of all local applications to the eye should be regulated by their effects. The smarting induced by them, should never exceed five minutes in duration. No *poultices* should ever be applied to an inflamed eye.—*Analyst*.

The Discoverer of Chloroform.—It has been generally stated that Chloroform was discovered, about the same time, by Soubeyran of France, and Liebig of Germany, and the claims of an American to the discovery have been strangely overlooked by nearly every writer on the subject. We take great pleasure in mentioning the name of *Dr. Samuel Guthrie*, late of Sackets Harbor, in connection with the discovery. Not only did Dr. Guthrie procure chloroform about the same time that it was obtained in Europe, but he was the first to publish an account of its therapeutical effects as a diffusible stimulus. This credit was lately awarded to him by a committee of the Medico-Chirurgical Society of Edinburgh. Dr. Guthrie died on the 19th of October last, aged sixty-six years, but not until he had seen his discovery invested with a dignity and an importance, of which he could have had but little conception when he announced it to the profession, in 1832. He was the inventor of the percussion powder, and the only manufacturer of that article in the United States. He was endowed with intellectual powers of a high order, and was a devoted student of nature, and eminent in his profession, until drawn away from it by pursuits in which he felt a greater pleasure. Chemistry was his favorite study, and in connection with chloroform, his name is likely to be familiar in both hemispheres.—*Western Journal*.

Cod-Liver Oil.—The following account of the chief forms of disease in which it has been found useful, is taken from an essay on the "History of the Fish-Liver Oil," published in the *Gazette Medicale de Paris*.

Chronic Rheumatism.—According to Alexander, Knood von Helmsdorstreit, Amelung, Brefeld, Basse, Fehr, Galcoma, Mall, Moeunig, Munzen-thalar, Michaelis, &c., who have all published their own observations concerning the fish-liver oil in chronic rheumatism, this medicine possesses such an efficacy in this disease that it surpasses in their eyes all the other remedies, without excepting the most lauded anti-rheumatics.

This opinion of different physicians, who have all experimented by themselves, cannot be taxed with exaggeration, if it is considered that amongst these cases there are found numerous instances of rheumatic patients being cured, who, after many years of suffering, and usage of all sorts of remedies, having lost their strength and despairing of cure, were completely cured by the aid of the fish-liver oil.

Rheumatic Sciatica.—The fish-liver oil did not prove less efficacious in this form of chronic rheumatism, which is generally distinguished by its obstinacy; this is verified by the observations of M. M. Knood von Helmsdorstreit, Rust, Amelung, Munzen-thalar, Settenger, and Spitter.

Scrofulous Diathesis.—Although there are various observations published in support of the excellence of this oil for certain severe forms of confirmed

scrofula, it requires something, candidly speaking, which will prove its efficacy in the scrofulous diathesis with certainty. The cause of this doubt ought not to be looked for in this circumstance, that the liver oil is less applicable in the scrofulous diathesis than in certain of the more severe forms of scrofula, but that the greater part of physicians are in the habit of only publishing their observations of the most severe cases. But if we consider that the scrofulous diathesis is the principle from which emanates, by the accession of aggravating circumstances, all the numerous and often dangerous forms of scrofula, and that the liver oil is in our eyes a true specific for the more severe forms of this affection, it is evident that this medicine is that which ought to counteract this principle with most certainty. Such is the opinion of M. Brefeld and Dr. Galama, who say that the liver oil is the most efficacious remedy for the scrofulous diathesis, and for no matter what form of confirmed scrofula.

Confirmed Scrofula.—Amongst the facts relative to the use of the liver oil in some of the manifold forms in which confirmed scrofula is presented, the most remarkable are those which Drs. Brefeld and Roppe have made known, the result of which is that this medicine universally is fit for all forms and kinds of scrofula. The principal forms of scrofula in which it has succeeded are given below.

Swelling of the Lymphatic Glands.—Under this title we have only to do with the swelling of the superficial lymphatic glands, situated immediately under the skin, in the region of the throat, to the nape of the neck, armpits, or groins.

The fish-liver oil is considered a certain and infallible remedy for swellings of the lymphatic glands which appear, mostly, first under the form of hard unequal tumors, nearly immovable and insensible, but which afterwards, when inflammation has laid hold of the cellular tissue which surrounds them and the skin which covers them, become inflamed and suppurate in their turn. The cure always requires a much longer time where those swellings are connected with a confirmed scrofulous diathesis. This also can be advantageously influenced by the external use of the oil by frictions on the painful and inflamed tumours; this way of employing the medicine is that which has prevailed and which is recommended by the greater number of practitioners in this form of scrofula. But if the fish-liver oil is efficacious in swelling of the lymphatic glands of a scrofulous origin, it is absolutely useless in swellings of the same glands which are the consequence of small pox, measles, or scarlatina, or even those which are developed in the course of syphilis, or of a carcinomatous affection.

Scrofulous Ulcers.—The effect of this medicine is quicker and more remarkable in scrofulous ulcers, with fungous and irregular borders, generally so difficult to cure, which arise either from suppurative inflammation of lymphatic glandular swellings, or from the dissolution of those indurated strumous tumors which are found so often in subjects of a scrofulous constitution, in all parts of the body indifferently. It has the same effect also in different traumatic lesions which so frequently become the origin of ulcers in subjects of a full scrofulous habit. Dr. Brefeld relies greatly on the external use of this oil, with which he prepares an ointment which he applies to the ulcers by means of a pledget. In one case, notwithstanding, treated by the oil internally, the result was as favorable. The strumous tumors which we have referred to above, and which ought to be distin-

guished from lymphatic glandular enlargements, are perfectly cured by the fish-liver oil, even after they have passed into the ulcerous state, provided that the oil be administered in proper time; it was the same in the case of the tumor being on the point of becoming an abscess. The tumors decreased during the internal and external administration of the medicine, and it seems they became dried up.

Chronic Exanthemata.—The fish-liver oil has been proved equally efficacious in the chronic exanthemata, which are developed under the influence of a scrofulous diathesis, whether they occupy parts of the body covered with hair or places which are destitute of it.

In this case, some say they have obtained the results from the internal use of this oil, while others pretend, on the contrary, to have obtained as good results by the external use of the same remedy. . The usage of it externally, tried for the first time with success by Dr. Guerard, for scald head, is principally recommended by Dr. Brefeld, and who pretends, what is more, not to have obtained any good result from the internal use of the liver oil in the exanthematous form of scrofula.

The milky scurf, so often observed in ill-nursed children, in whom there have never before been observed any symptoms of scrofula, and which, according to Dr. Brefeld, forms the transition of true scrofulous exanthemata; the exanthemata which are observed on the long-haired skin of young children, and which often envelope the whole face; scald head, which is not uncommon to see last till the age of puberty; and, finally, the scrofulous exanthemata which come out on every other part of the body, were quickly cured, according to Dr. Brefeld, by the external use of the liver oil, and even after, in some cases, they had for a long time used the internal treatment in vain. Experience taught him that the use of the liver oil, either externally or internally, had no effect on malignant, hereditary, or contagious scald head, even when combined with oil of turpentine by the advice of Dr. Marteus; the same may be said of some psorical and syphilitic exanthemata.

Dr. Hauf reports a case of humid herpes causing an insupportable pruritus, which, after having resisted all sorts of remedies, was cured by the use of friction of fish-liver oil.

Rachitis.—The fish-liver oil is, without exception, the best remedy for rachitis, in all its stages, and under whatever form it presents itself; such is the nearly unanimous opinion of the German and Dutch Physicians, who affirm with one accord that it is much superior to any of the so-called anti-rachitic remedies. According to Dr. Schmidt, who has most insisted on the advantages of this medicine, in twenty-one rachitic patients which he had treated at the time when he made known his results, thirteen were cured, four were in process of being cured; as to the others, judging from the progress which they had made for the little time they were under treatment, a very favorable prognosis might be drawn.

In France, far from partaking of the enthusiasm of the German physicians for this medicine, they have kept on their guard, perhaps with an exaggerated distrust; its efficacy in rachitis has nevertheless appeared to some placed beyond doubt. We have said that M. Bretonneau and M. Trousseau, by their example, had obtained good results. It is in these terms that Professor Trousseau expresses himself on this subject: "We have often obtained cures, the rapidity of which surpassed our expectation.

Sometimes, after four days of treatment, the sharp pains which the children felt in all their limbs, ceased; and the bones which could be bent, acquired, at the end of five days, a considerable solidity.'

General conclusions.—Chemical researches have taught us that the fish-liver oil ought to be considered as a very compound medicine. Greasy, neutral matter, bilious matter, iodine, phosphorus, each of them, well known as possessing great therapeutic efficacy—also a certain number of organic elements, such as butyric acid, gaduine, and some others, the medical action of which is less known—finally, various inorganic salts, as the phosphate and sulphate of lime, chloride of lime, phosphate and sulphate of magnesia, are the substances of which it is composed.

But it may be asked, to which of these components does the oil owe its special virtues? Is it to the iodine, fatty matters, phosphorus, or other principles?

If the diseases, for which the liver oil is administered with success, be duly reflected upon, it cannot escape any one, that there are in each of them various indications to fulfil to obtain a cure. For the most part, there is debilitated digestion to be excited, nutrition to be regulated, secretions to be re-established, and the lymphatic system to be stimulated; while, on the other hand, the modifying of the organic nervous system, is presented as one of the most important indications to be fulfilled. Neither the bilious matter, nor the fatty matter, nor the iodine, nor any other principle, whatever it may be, taken alone, is capable of satisfying at the same time, all these indications, and it is not to any of these substances in particular, that the fish-liver oil owes its medicinal properties, and the faculty of fulfilling so different and so numerous indications. But it is by the union and co-operation of, if not all, at least the greater number of these substances.

In this state of things, the active principle of the fish-liver oil cannot be discussed in particular, like the active principle of cinchona; but attention ought to be paid, if not to all, at least to the principal elements of the oil, as each of them satisfying special indications which the diseases for which this medicine has been proved efficacious, present.

The medical researches having proved that the black fish-liver-oil is more efficacious in rheumatism and scrofula than the other species, and the chemical researches having shown, on the other hand, differences, if not qualitative, at least quantitative, between the three kinds of oil examined, it follows that the principles that are in greater proportions in the black oil than in the other two kinds, ought to be considered as those which best fulfil the principal indications. Therefore it is not the neutral fatty matters, which are found in nearly equal quantities in the three species, nor the iodine, nor the phosphorus, nor the organic salts, which are found in greater quantity in the pale oils than in the black oil, which can be considered as more efficacious than the other principles for the cure of rheumatism and scrofula. It appears, then, that it is to the bilious matter and butyric acid, rather than the other principles, that the greater part of the therapeutic effect can be principally attributed, for they are the substances which are found in the greatest quantity in the variety of oil proved to be the most active.

As to the matter unknown up to this time, and which M. Jough first proved the existence of, in the product of the analysis of the different species of *Gadus*, and to which he applied the name of *Gadinæ*, it does not appear, on account of its insolubility, at least in the condition in which it

was examined, to have a right to be considered as an active principle of the fish-liver oil.—(*Gazette Medicale, and Dublin Med. Press.*)

Dr. Bennett considers that the therapeutic action of cod liver oil is due to its fatty composition, and its being perhaps more easily assimilated than other fats. He believes that in rheumatic and tubercular affections, the albuminous compounds are in excess, and the oily compounds deficient; that, therefore, the most rational treatment is to supply the deficient oily matters directly. He explains the failure of other oils to effect benefit, which might be expected, if the fatty matter is the active principle, upon the supposition that other oils, such as olive oil, are purgative. The author proceeds to state that he thinks cod liver oil is destined, in the hands of the rational practitioner, "to be an important means of curing a class of diseases hitherto considered of the most dangerous and fatal character."

Speaking of the effect of this oil in phthisis, Dr. Bennett's testimony is greatly in its favor; and, in fact, it may now be satisfactorily demonstrated that there is no medicine or system of treatment which holds out so much encouragement in the management of consumptive cases.—(*"On Cod Liver Oil," Edinburgh, 1848; and Monthly Journal, May, 1848.*)—*Ranking's Report on Pract. Méd. in Abstract, vol. vii.*

Cod Liver Oil.—H. B. Skinner, M. D., 60½ Cornhill, Boston, is a manufacturer of this now much-admired remedy. He is successful in overcoming the offensive fishy odor, which is one of the formidable obstacles with some, to its internal administration. In transparency and freedom from impurities, specimens from this establishment are quite unobjectionable, and the demand for a pure article is constantly increasing. Those embarked in the enterprise of furnishing the medical market must reap a rich harvest.

Mr. Souther, in Leverett street, has also acquired reputation for the elegant manner of putting up the oil of his make. Till he gave us some statistics in regard to the extent of this comparatively new business in Boston, we had no conception of the active demand for cod liver oil. Mr. Souther, in the first place, has quite a squadron of fishermen under his patronage, who are deriving an unexpected revenue from a source never contemplated by them till this new enterprise was started. Mr. Souther manufactures hundreds upon hundreds of gallons, in a short space of time—and to keep his presses working, he is receiving daily the raw material, sometimes as many as ten barrels a day, of the livers of cod-fish, from which alone the true medicinal cod-liver oil is procured. Boxes of beautifully labelled bottles are sent off in all directions; and, although considerable competition already begins to be exhibited, the supply from all reliable sources is represented to be inadequate to meet the influx of orders from abroad.

An oil is also obtained from the skate, ling, cusk, and some other fishes on this coast; but less confidence is reposed in either of these oils than in that from the cod. This oil consists chiefly of oleic and margaric acids, in union with glycerin, combined with a small proportion of resinous matter, phosphoric acid, iodine, and bromine. Its medical properties are ascribed to the iodine, small as the quantity is in any given quantity.

In strumous diseases, much reliance is placed on its action. Its flattering influences are fully admitted by taking a few ounces habitually; and the

complexion, too, is represented to become clear and much improved by persisting in its use. This fact may ultimately lead to its patronage among ladies, as a cosmetic.—*Bost. Med. and Surg. Jour.*

Fibrinous Concretion of the Heart.—On the 18th of April, 1848, Mr. Harrison presented a specimen of diseased heart, taken from a patient, who, having previously enjoyed pretty good health, began to complain of debility, lassitude, and obscure chest symptoms. Suddenly he was attacked with extreme difficulty of breathing; the skin greatly congested; blue from head to foot; surface cold; pulse scarcely to be felt; heart beating rapidly, and rather forcibly; orthopnoea; cough; expectoration of viscid mucus mixed with blood;—not hæmoptysis. Crepitation was heard at various points, and percussion was dull. He sunk gradually.

Autopsy sixteen hours after death. General surface still dingy; about a pint of straw-colored fluid in each plural cavity; the lungs gorged with black fluid blood; the heart filled the pericardial bag; right auricle enormously distended with blood, the ventricle comparatively empty; left cavities distended with black blood and fibrinous deposit. The auricle was hypertrophied, and almost filled with a mass of vegetation, nearly closing the auriculo-ventricular opening, only a small orifice remaining posteriorly. The vegetations were made up of large granules, intimately adherent with each other, and connected with the auricular surface of the valves, forming a solid vascular nucleus. The ventricular surface of the valves were perfectly free. Liver large and gorged.

On examining the fungus, it appeared to be more a fibrinous deposit than any vegetation from the valves, for the serous membrane of the valves elsewhere, did not exhibit any trace of inflammation, and it was probably deposited there on some unknown nucleus.—*Prov. Med. Journal, England.*

Hood's Illustration of Hydropathy.—"It has been our good fortune, since reading Claridge on Hydropathy, to see a sick drake avail himself of the 'water cure,' at the dispensary in Saint James Park. First, in wading in, he took a 'Fuse bad,' then took a 'Sitz bad,' and then turning his curly tail up in the air, he took a 'Kopf bad.' Lastly, he rose almost upright on his latter end, and made such a flapping with his wings, that we really expected he was going to shout 'Priesnitz, for ever.' But no such thing. He only said, 'quack! quack!! quack!!!'"

EDITORIAL DEPARTMENT.

Buffalo Medical College. Changes in Lecture Term.—The Faculty of this Institution have determined on some changes as respects the lecture term for the next session. The regular term for 1849-50, will commence on the *first Wednesday in November, and continue sixteen weeks.* There will be a preliminary term of four weeks, attendance being gratuitous and voluntary. During this preliminary term, in addition to dissections, (to which it has hitherto been limited,) clinical instruction will be given in connection with attendance at the hospital, and also daily lectures. It is not intended by the latter, to compromise the instruction belonging to the regular term, but to embrace special subjects which may advantageously be treated more fully than is usually practicable in comprehensive, didactic courses.

The reader will observe that the extension of the regular lecture term, which was promptly adopted by this college in conformity with the recommendation of the National Medical Association, is, for the present, abandoned. Justice to the interests of the college, seems to require this policy, so long as other, and especially proximate institutions, continue to adhere to a four month term. The Buffalo school was the fourth in the order of time, to make the change proposed by the Association. The aggregate of schools that have adopted it, will probably not exceed double the number, and we do not, as yet, observe intimations that their example will be generally followed. We assume to say, as regards this, and any other proposed improvement, that the school with which we are connected, will not be backward in practical conformity, provided its interests will not be materially jeopardized in consequence of the non-concurrence of other institutions, and particularly of those institutions with whom it must stand somewhat in the relation of competition. But, until then, in so far as this measure is concerned, the friends of the institution must be content with the disposition which has been evinced by the trial which has been made, and by endeavoring to secure the advantages of a lengthened period of instruction, by means of lectures, etc., during a preliminary term which students are invited to attend gratuitously, but which is not obligatory, and will not interfere with the regular term.

Those of our readers who may recollect the tenor of former editorial

remarks on this topic, are aware, that we have, from the first, advocated the propriety of an extension of the term of lectures in medical colleges. We have done so under the belief that the various branches of medical education are too extensive to be fully and satisfactorily taught in so short a period. We now write, after an opportunity of having tested somewhat the practical working of the plan of continuing lectures for a longer period, and we are free to say, that we are less disposed, than heretofore, to urge its importance. We are now nearly at the close of, virtually, a six months' session, and we can realize, what before we had imperfectly appreciated, that the unremitted continuance of labors for so long a period becomes fatiguing, for both teacher and pupil, to a degree calculated to compromise their usefulness. While, therefore, it must be admitted, that a four months' term, divided among the several departments of medical instruction, is too short, in proportion to the amount of information to be communicated, we are not satisfied that an extension of the time to six months, is the best method of improvement. We are not prepared, at present, to submit a plan to be preferred, but would leave the subject to be discussed by others, and perhaps, also, by us at a future time.

The new edifice, now in process of completion, will be in readiness for occupancy at the commencement of the next session of the Buffalo Medical College.

Cholera.—The packet ship *Liverpool*, from Liverpool, with four hundred passengers, recently arrived at New York, with cases of cholera on board, forty cases having proved fatal during the passage. The vessel and passengers were placed in quarantine, where they are still detained. No new cases, however, have lately been developed, nor has the disease made its appearance out of the vessel.

We have no information of the existence of cholera, at the present time, as an epidemic in any part of our country. Isolated cases are reported to occur occasionally at New Orleans, and other south-western towns, showing that there is not entire exemption from the specific cause, and, consequently, from the probability of the re-appearance of the disease in an epidemic form.

Erie County Alms House.—Dr. J. B. Pride has been appointed Physician and Resident Superintendent of this Institution.

BIBLIOGRAPHICAL NOTICES.

Miscellaneous Publications.—Under this head we shall proceed to enumerate various publications with which we have been favored, indulging comments upon some of them, and, with respect to others, being obliged to express, in this way, with more brevity than would suit our inclinations, acknowledgements of the courtesy of their respective authors, or publishers.

Braithwaite's Retrospect. Part the eighteenth. New York. Daniel Adee. 107 Fulton st. 1849.

Raking's Abstract. No. 8. Philadelphia. Lindsay & Blackiston. 1849.

These half-yearly publications are too well and generally known to require remark, save that they do not appear to diminish in value.

Report of the Eastern Asylum in the City of Williamsburg, Virginia, 1848. Richmond. 1849.

John M. Galt, M. D., is Physician and Superintendent of this Asylum for the insane. The Institution is to be enlarged; the sum of twenty-five thousand dollars having been appropriated by the State for that purpose. The Report of Dr. Galt contains a description of the plan and architectural style of the new buildings to be erected. The Institution is in a flourishing condition.

Report of the Pennsylvania Hospital for the Insane, for the year 1848.

By THOMAS S. KIRKBRIDE, M. D. Physician to the Institution. Published by order of the Board of Managers. Philadelphia. 1849.

This Institution will accomodate about two hundred patients. Dr. Kirkbride is of opinion that this number is as many as can be visited daily by one medical superintendent, and that a larger number should not be collected in any one building. In this we think he is right.

The following suggestion is to us novel:—

"Detached Cottages for Patients.—The additional experience acquired since the date of my last report, goes fully to confirm the views expressed a year ago, in reference to the value of a few detached cottages in connection with any hospital for the insane that receives all classes of patients. Where persons have ample means, there can be no reason why, when insane, they should not have around them every comfort, or even harmless luxury, which wealth can procure, or to which they have been accustomed. There can be no reason why, if they fancy it, they should not be select in their associates; why they should not have educated and refined companions constantly with them, nor why they should not have apartments entirely private, in which they can receive their friends and relatives whenever it is deemed advisable."

Sixteenth Annual Report of the Trustees of the State Lunatic Hospital at Worcester, Mass. Dec. 1848.

Geo. Chandler, M. D., is Physician and Medical Superintendent of this Institution.

The year commenced with three hundred and ninety-four patients. The smallest number, at any time, was three hundred and eighty-eight. The average number for the year was four hundred and four. This number was too great for the accommodations, irrespective of the difficulties of proper medical supervision of, individually, so large a number. Dr. Chandler is opposed to farther enlargement of the hospital, and advocates the erection of another hospital in the western part of the State. He also suggests the propriety of devoting a hospital exclusively to females.

Report of the Board of Visitors of the Boston Lunatic Asylum in the Matter of the Superintendent of that Institution. 1849.

The circumstances giving occasion for this report, were as follows: Dr. Stedman, Physician to the Hospital, it appears, after examination of the case of the wife of Dr. Kraitsir, of Boston, regarded the case as one of insanity, and gave a certificate of his opinion to that effect. For reasons which are not stated in the report, and of which we have heard nothing, the Common Council of the city instructed the Board of Visitors to cause an immediate investigation of the circumstances which induced Dr. S. to give this certificate.

In the communication of Dr. S. to the Board, he takes an independent, manly position with respect to the right of the City Council to make a mandatory requisition upon him for explanation of professional conduct in his private capacity, having no connection with his public duties. He assumes that if the requisition is made under suspicion of his having been guilty of bribery, corruption, or conspiracy, the judicial courts, or the grand jury, are the tribunals to which he should be called upon to answer; and if the inquiry is made irrespective of any such suspicion, it is a matter of his own, concerning which he is under no obligations to answer. Nevertheless, having been publicly called upon for the statement, and in consideration that his silence might furnish occasion for the calling in question, by the public, of his humanity and integrity, he accedes to the mandate. The explanation appears to have been satisfactory. The complaint, as in many other instances of the same description, seems to have originated in gossip, or malice, which, when explained, leaves the authors in a ridiculous predicament.

Dr. S. is entitled to credit for taking a stand, due alike to himself, and to

the character of the profession. The freedom from servility to those upon whom his tenure of office depends, which he displays, is good evidence that he is well deserving the honorable and responsible situation which he occupies.

House of Representatives. Dr. Edwards, from the Select Committee, to whom was referred the Memorial of W. T. G. Morton, asking Compensation from Congress for the Discovery of the Anæsthetic or Pain Subduing Property of Sulphuric Ether. Report.

Before this committee, the proofs of originality, or rather priority, in the application of the vapor of ether to anæsthetic purposes, were submitted by Drs. Jackson and Morton, (each of whom appeared personally before the committee, and also Mr. H. L. Lord, on behalf of Dr. Jackson,) and the committee decided in favor of the claims of the latter, recommending an appropriation, but not fixing upon any sum. The committee say that they are satisfied "that Dr. Morton is entitled to the merit of the discovery. *The great thought was of producing insensibility to pain, and the discovery consisted in that thought, and in verifying it practically by experiment.* (This passage is italicised in the report.) For this, the world is indebted to Dr. Morton," etc.

It does not appear that the committee investigated the claims of the late Dr. Wells, of Hartford, Conn., to the discovery. He is alluded to, in the Report, as having made an unsuccessful experiment with the nitrous oxide, in Boston, anterior to the experiments of Morton. The fact of the experiment, albeit unsuccessful, shows that he entertained the "great thought" referred to in the foregoing paragraph. But is it not abundantly established by reliable witnesses, that he had made, previous to this unsuccessful experiment at Boston, successful experiments with the nitrous oxide, and on one occasion, even with the ether; and that surgical operations had been performed upon patients rendered insensible by him? If so, why is he not to be regarded as the discoverer? It seems to us a plain case, although we have no wish to detract from any merit which may attach to Drs. Jackson or Morton, either or both, for their subsequent, and, so far as relates to bringing the subject before the profession and public, more successful labors. With respect to the rival efforts of the two latter gentlemen, and their respective friends, the prospect of their agreement, or the triumph of either party, seems more remote than the discovery of the source of the Niger. We can see no better way than to decide from their own affidavits, when they applied for a patent, in which, (if we remember rightly) they make oath that the discovery was jointly made.

Jarvis on Dislocation of the Shoulder.—A pamphlet of 32 pages, setting forth the efficacy of the *adjuster*, invented and patented by Dr Jarvis, in reducing luxations of the shoulder. Compiled by GEORGE KELLOG, A. M. of Derby, New Haven Co. Conn.

A Discourse on the Influence of Diseases on the Intellectual and Moral Powers. By JOSEPH MATHER SMITH, M. D. Professor of Theory and Practice of Physic and Clinical Medicine, College of Physicians and Surgeons, N. Y.

An introductory lecture on a philosophical subject, philosophically treated, and well deserving attentive perusal by lay readers, as well as physicians.

An Introductory Lecture, delivered before the Students of Memphis Medical College. By GEORGE R. GRANT, M. D. Professor of the Theory and Practice of Medicine. Published by the class.

A sensible discourse, pointing the student to the bright examples of distinction and usefulness in the medical profession, which offer themselves for imitation.

An Essay on Strictures of the Urethra, with an account of the mode of curing strictures by cutting. By JAMES BRYAN, M. D. Philadelphia.

A paper of 21 pages. The subject is fully expressed in the title. Of the merits of the suggestions offered we do not presume to judge.

On Etherization: a Paper read before the Medical Society of Louisville. By LUNSFORD P. YANDELL, M. D. Prof of Chemistry and Pharmacy in the University of Louisville. Published by the Society. pp. 36.

An excellent summary of reliable facts gathered from various sources, respecting the safety of etherization, and its various applications to surgery and disease. It must have cost the author considerable labor, and is very opportunely presented to the profession.

Annual Address delivered before the New York State Medical Society, and Members of the Legislature, at the Capitol. By ALEXANDER H. STEVENS, M. D. President of the American Medical Association, of the College of Physicians and Surgeons at New York City, and of the State Med. Society, etc.

This address is entitled "A Plea in Behalf of Medical Education." The appreciation of it by our legislators at Albany, before whom, together with the members of the State Society present at the annual meeting, it was delivered, is evinced by a resolution of the senate to print it for distribution among themselves. The Medical Society also ordered an issue in a separate form, as well as in connection with "their Transactions." These are high compliments, but not greater than the production deserves. It is

a high toned, well written address, and, we can well conceive, was impressively delivered. The author shows what medical men have done, and are doing in the cause of humanity; and thence deduces the claims of medical education upon the Public. He advocates a system of free education in medicine, urging the Legislature to endow medical colleges, appropriate salaries from the state treasury, and open the doors without charge.

Anniversary Discourse before the New York Academy of Medicine. By JAMES R. MANLEY, M. D. Published by order of the Academy.

Dr. Manley appears to be of that class who are under painful apprehensions that the medical profession of this country, already degraded by the ignorance and incompetency of its members, is constantly deteriorating, chiefly in consequence of the malversations of incorporated medical schools. The Doctor's remedy, we suppose, would be to divest diplomas granted by medical institutions of any virtue, as a license to practice, and entrust the bestowal of testimonials of qualifications to a board of examiners, composed of practitioners not engaged in teaching. We do not purpose to discuss the propriety of such a change. It is perhaps sufficient to say that such boards do already exist, in the State Censors for the different districts of this state. Is it not a matter of surprise that so few candidates appear before these boards, if the plan of separating licensing and teaching possesses the recommendations claimed for it? At all events, the small number licensed by state and county censors, and the proportion of those licensed who subsequently resort to the means necessary to secure diplomas, sufficiently show the general opinion of the profession, as well as of the public, on this subject.

Lecture on Obstetrics and the Diseases of Women and Children.—By GUNNING S. BEDFORD, M. D. Prof. of Obstetrics in the University of New York.

In this discourse the author sustains the reputation acquired by previous productions of a similar character.

An Address, Delivered at the Opening of the Rock Island Medical School. By M. L. KNAPP, M. D. President, and Prof. of Materia Medica and Therapeutics.

This production invites criticism, but we decline the invitation.

An Account of some of the Most Important Diseases Peculiar to Women. By ROBERT GOOCH, M. D. With illustrations. Second edition. Philadelphia. Ed. Barrington and Geo. D. Haswell. 1848. 8 vo. pp. 322.

This, although not a new book, will amply repay perusal by those not already familiar with its contents. Dr. Gooch was an original thinker, and

an excellent practical observer. If we mistake not, to him is due the credit of first directing attention to that morbid condition in children in which congestion of brain is simulated—the hydrancephaloid disease, of Marshall Hall. A chapter of this volume is devoted to that subject. His observations on irritable uterus, on the first publication of the work, excited much attention. We suppose the affection described by him is now appropriately to be classed among the varied phenomena of what is ordinarily called spinal irritation. The remaining subjects treated of in the work are, peritoneal (puerperal) fevers; disorders of the mind in lying-in women; thoughts on insanity; mode of discriminating pregnancy from the diseases which resemble it; polypus of the uterus, and excrescencies liable to be mistaken therefor.

We would especially commend to the attention of the medical student and young practitioner, the advice which the author gives in the preface, touching the means of acquiring useful, practical knowledge in medical science.

A System of Clinical Medicine. By ROBERT JAMES GRAVES, M. D., M. R. J. A., etc. With notes, and a series of lectures, by W. W. GERHARD, M. D., etc. Third American Edition. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1848. 8 vo. pp. 751.

"The demand for a new edition" (as the publishers remark in the preface) "is the best proof of the high character these lectures have gained in the United States, and of the very extended reputation they have justly attained." The present edition is printed from a new one, considerably enlarged, published by Dr. Graves, in Europe, since the preceding American Edition was issued. Some detached papers, however, included in the last European Edition, are omitted, and will, probably, be issued by the publishers in a separate form.

The work is eminently practical in its character. It commends itself, as containing the clinical views of two distinguished teachers, both ranking among the ablest pathologists, and the most judicious practitioners, the profession affords.

An Illustrated System of Human Anatomy, Special, General and Microscopic. By SAMUEL GEORGE MORTON, M. D., Penn. and Edinburg. Member of the Medical Societies of Philadelphia, New York, Boston, Edinburg and Stockholm; author of *Crania Americana*, *Crania Aegyptiaca*, etc. With three hundred and ninety-one engravings on wood. "Oculis subjecta fidelibus." Philadelphia: Grigg, Elliot & Co., No. 14 North Fourth Street. 1849. pp. 642.

We welcome this volume with pleasure, and, as an American work, with

pride. Its beautiful typography, and well executed illustrations, are highly creditable to the enterprising publishers, and, in so far as we have been able to examine it, it seems to us fully commensurate with what would be expected from the pen of the distinguished author. We are assured by those who have bestowed upon it more critical attention than our engagements have as yet permitted us to do, that, as a text book of anatomy, it is all that could be desired. We had been promised an extended review by an able correspondent, but, much to our disappointment, it has not been received. If the little we have said, should, perchance, determine any of our readers to purchase the work, we doubt not they will feel obliged to us.

Annual Meeting of the New York State Medical Society, February, 1849.—As it will be several weeks before the Transactions of the State Medical Society for the present year will be issued, we copy the following brief notice of it, with the list of officers, from the Albany Evening Journal:—

At the recent Annual Meeting of this Society, held in this city, it was gratifying to observe the unusually large attendance of medical gentlemen from different and remote parts of the State.

It is an evidence of the increasing interest felt by the medical public in its proceedings. The very able and interesting address, delivered by its President, Dr. ALEXANDER H. STEVENS, in the Assembly Chamber, before the members of the Society, members of the Legislature and citizens, gave an additional interest to the meeting.

The subject of the address—Medical Education, would at all times commend itself to public attention. But the masterly ability with which the subject was presented by the distinguished author, gave it new interest, and wrought conviction in the minds of all, of the necessity of granting every facility for the attainment of a thorough medical education, to those who shall hereafter enter the medical profession.

The following officers were elected for the ensuing year:

President—ALEXANDER H. STEVENS, M. D.

Vice President—ALEXANDER THOMPSON, M. D.

Secretary—P. VAN BUREN, M. D.

Treasurer—P. VAN O'LINDA, M. D.

Censors—*Southern District.*—Drs. J. R. Manly, John Cheeseman, Chas. S. I. Goodrich.

Eastern District.—Drs. Joel A. Wing, Thos. B. Blatchford, T. R. Beck.

Middle District.—Drs. Augustus Willard, Jenks S. Sprague, John McCall.

Western District.—Drs. Bryant Burwell, William Taylor, John Coats.

Committee of Correspondence.—Drs. Alonzo Clark, Barlow Wright, John H. Wheeler, Hiram Corliss, Helon F. Noyes, Augustus Willard, Phineas H. Burdick, Bryant Burwell.

The following gentlemen were elected permanent members: Drs. Alex-

ander H. Stevens, New York; John M. Pruyn, Columbia; Morgan Snyder, Montgomery; Patrick H. Hard, Oswego; Dyer Loomis, Chenango; Enos Barnes, Ontario.

The following gentlemen were elected honorary members:—Alonzo Clark, M. D., New York; Joseph Parish, M. D., Philadelphia.

The following were elected delegates to the National Medical Convention:

Southern—Censorial District—Drs. A. H. Stevens, New York; Charles S. J. Goodrich, Brooklyn; Willard Parker, E. G. Ludlow, J. R. Manly, New York.

Eastern District—Drs. R. G. Frary, Columbia; Simeon Snow, Montgomery; J. McNaughton, Albany; T. W. Blatchford, Rensselaer; T. R. Beck, Albany.

Middle District—Drs. Henry Mitchell, Chenango; Dehring, Utica; J. McCall, Utica; Jenks S. Sprague, Otsego; A. Willard, Chenango.

Western District—Drs. Reynold Coats, Ontario; Daniel T. Jones, Onondaga; Alexander Thompson, Cayuga; Bryant Burwell, Erie; G. W. Bradford, Cortland.

Transactions of the Medical Society of the State of New York. Vol. vii. Part 3.

Since the foregoing article was in type, a copy of the published transactions of the State Society has been received. In addition to the address by Dr. Stevens, it contains a paper *On the Diseases of Onondaga County.* By D. T. Jones, M. D., of Baldwinsville, Onondaga County. It is a short communication, and will probably be found in the Eclectic Department of the next number of this Journal.

In glancing over the proceedings, the only interesting matter which arrests our attention, is the recommendation of the Society to the County Societies, to provide in their By-Laws for the constitution of a *Primary Board*, for the examination of young men about to commence the study of medicine, and requiring that the applicants shall, in addition to a good English, academic education, have made respectable attainments in the Latin and Greek languages, and that he shall sustain a good moral character. Of a committee of five who reported this plan, two were from this city; Dr. F. H. Hamilton, chairman, and Dr. B. Burwell. The society in this county, anticipated the action of the state society, by the adoption of the same measure at its annual meeting in January last.

Dr. B. Burwell, of this city, is one of the delegates to the National Association appointed by the State Society.

Life Insurance and Irregular Practitioners.—We find in the Boston Med. and Surg. Journal, the following extract from a private letter by the Secretary of the *American Mutual Life Insurance Company*, to the Ed-

itor. The position taken by the company is certainly reasonable and proper. Strictly speaking, as it is but justice to the profession, and a measure of sound policy on the part of the company, it can hardly be considered in the light of a compliment; yet, such is the want of decent respect for legitimate medicine by a portion of the discriminating public now-a-days, that we cordially concur in the remark of our respected contemporary, that "the brotherhood should, if they do not take out policies for themselves, use their influence in behalf of corporations that set their faces decidedly and irrevocably against all orders of quacks and quackery." There is another reason why we should pursue this course—viz: Corporations adopting similar regulations are, *ceteris paribus*, much safer and more reliable.

"It is always one of our rules to reject an insurance, if we know the family physician to be a quack, or belonging to that class of practitioners whose system of practice is to give that which would neither inconvenience a well man, nor benefit a sick one. Life Insurance Companies should look at the doctor risk, with the same care that they do a sea, or climate risk. We intend to insure none but those who have a home, friends, and a good doctor. Wanderers, the homeless, friendless, and heedless, we carefully avoid, and have rejected many applications, where the subject itself was good, for the reason that we were unwilling to encounter the risk resulting from personal carelessness, and the chance of being houseless, friendless, and doctorless in case of sickness. We do not allow an insured person to trifle with his life (or if he does, not to trifle with our funds,) by going into the Southern States during the sickly months, nor by wandering in unsettled portions of the United States; but all this risk is, in our opinion, not so great as that incurred by insuring a man, who, when he becomes sick, allows a certain class of doctors to trifle with his life. As we seek business only from the old and healthy States, and profess to be, and being truly, a 'perfectly Mutual Company,' it requires much care and some sagacity to preserve untarnished the standard we have adopted."

Epidemic Cholera; its History, Pathology, and Treatment. By C. B. COVENTRY, M. D. Professor of Obstetrics and Medical Jurisprudence in Geneva Medical College, and Professor of Physiology and Medical Jurisprudence in the University of Buffalo. Buffalo. Geo. H. Derby & Co. Publishers. 1849. 18mo. pp. 119.

This little treatise on cholera, by our respected Colleague, is opportunely submitted to the profession, and will, we think, prove an acceptable offering. Prof. C. has devoted much thought and investigation to the subject, and gives, succinctly, the views which he has been led to form, and adopt, by comparison of the opinions of others, and his own clinical study of the disease.

The appearance of the volume is highly creditable to Buffalo typography, and to the enterprising and worthy publishers, Geo. H. Derby & Co.

Handbills for the cure of diseases!—The following resolutions of the city authorities of New Orleans, relative to the posting of handbills for the sale of patent medicines and the cure of diseases, we copy from the New Orleans Medical and Surgical Journal:—

COUNCIL OF MUNICIPALITY, No. ONE,
Extract of the Sitting of Monday, 24th June, 1846. }

Be it further Resolved, That the fact of announcing publicly, by posting hand-bills in public places, the sale of medicines for the cure of diseases, shall constitute a police misdemeanor.

Be it further Resolved, That a fine of twenty-five dollars shall be imposed on every bill sticker convicted of having posted up in one or several places, one or several hand-bills, offering for sale medicines for the cure of diseases.

[Signed]

PAUL BERTUS, President,

A true copy:

A. D. CROSSMAN, Mayor.

We think, with our contemporary, that the Council is entitled to credit for this action, and we should be glad to see the authorities of other cities follow so excellent an example. One cannot turn a corner of the streets, without the eye being greeted with such advertisements, many of which are grossly indelicate. It is a nuisance, which regard for decency requires should be abated. We know not how it is in New Orleans, but, in this city, the impertinence of those engaged in the business does not stop at posting advertisements,—agents being employed to distribute cards and pamphlets, by leaving them at the doors of private houses. Frequently the objects of such publications are disguised under the nominal appearance of almanacs or newspapers. The imposition upon the credulous, and thus obtaining money upon false pretences, is by no means the chief evil of these documents, but they are often filled with gross and disgusting details, peculiarly unfitted for the perusal of females and children, and doubtless conducive to immorality. The reform, to be complete, should not stop at handbills and pamphlets, but should extend to family newspapers, and even religious periodicals. We hope the time will arrive when the moral sense of the community will demand the entire expurgation of such things from the latter.

Compliment to Gen. Taylor by the New York State Society.—Doctor Stevens, President of the State Society, at the last annual meeting, proposed a recommendation, by the Society, of Gen. Taylor, to the Regents of the University, for the honorary degree of M. D. The following resolutions, which were offered by Dr. F. H. Hamilton, were adopted as a substitute for the diploma, for which substitution we presume Gen. Taylor will be much obliged:—

Resolved, That the sentiment uttered by Gen. Zachary Taylor, at the battle of Buena Vista, that "He would not leave his sick and wounded behind him," is eminently humane, and merits a record and memorial in the archives of the medical profession.

Resolved, That it is hereby recorded and commemorated.

Resolved, That a copy of this resolution, signed by the President and Secretary, be transmitted to Gen. Taylor.

Obituary.—The following letter communicates intelligence of the decease of Dr. A. G. Grow, a graduate of the Medical College in this city, at the last commencement, who is remembered as a young gentleman of great moral worth and promising attainments.

DR. FLINT,

CARLTON, MARCH 20TH, 1849.

Dear Sir:—My esteemed friend and classmate, Dr. A. G. Grow, is no more. He died in Oakley, La. on the 19th of January last, of cholera, aged 28 years.

He possessed rare qualities of mind, which were peculiarly adapted to the duties and responsibilities of the profession he had chosen; but, alas! he was permitted to enjoy but a brief realization of the labors of our time-honored profession, ere his hopes and aspirations were crushed, and the desires of a benevolent heart quenched by the grave.

I remain, Sir, your Ob't. Serv't.

N. E. BALLOU, M. D.

Buffalo Medical College.—The annual commencement at this Institution is on the 18th inst. The valedictory address will be delivered by Prof. C. A. Lee. The commencement exercises will take place in the evening, and not in the forenoon, as hitherto.

 Dr. Green's communication will appear in our next

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AND

MONTHLY REVIEW.

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MAY, 1849.

NO. 12.

ORIGINAL COMMUNICATIONS.

ART. I.—*Remarks on the Construction of Obstetrical Forceps, with a Description of an Instrument, Employed by* JAMES P. WHITE, M. D.
Prof. of Obstetrics in Med. Dep't University of Buffalo.

MR EDITOR:—

In the belief that the most useful of all obstetric instruments, the forceps, is exceedingly defective in construction, as we find it in the hands of most practitioners in this country, I hope to render a service, not entirely unacceptable, by calling the attention of the profession to the subject. I trust, also, that the instrument which I shall recommend will be found to combine all the advantages possessed by many of the various instruments, used by different accoucheurs, in this country and in Europe.

In addition to this eclecticism, I flatter myself that I have been able to make a few suggestions, not altogether unworthy of consideration. Should I fail in the undertaking, may I not at least hope, that sufficient interest will be awakened, to induce some more ingenious observer to direct his attention to the subject, who will substitute a safer and better instrument than is now offered for sale by most of the makers and venders in this country?

There can be little doubt that much of the discredit cast upon its application in suitable cases, has arisen from the fact that the instrument used was not adapted to fulfill all the purposes for which it was designed. Either it was too heavy and thick; it did not possess the requisite length and curves to seize the head at the superior strait; or could not be locked without difficulty, which rendered it useless; and the operator, after a fruit-

less attempt to apply it, has thrown it by in despair, and condemned the instrument altogether. There can be as little doubt, also, that partiality for the short forceps, which can be used only when the head is at the inferior pelvic strait, has greatly contributed to the infrequency with which they are resorted to by English practitioners. National prejudice has seldom manifested itself more strongly than in the tenacity with which they cling to the short forceps. All the forceps of that country are very much alike, differing only in an endless variety of slight deviations. It is also worthy of remark that the French and German practitioners are nearly unanimous in their preference for the long forceps.

In France, as has been well remarked, they all bear a "family likeness to the forceps of Levret," possessing in greater or less degree the second curve, which corresponds to the general axis of the pelvis, and which, with their greater length, renders them suitable for penetrating the parturient passages and seizing the head at the brim, if necessary. Does not this difference account, in part at least, for the greater partiality for the instrument, and the greater frequency of its use on the continent than in England.

Whilst in France and Germany they are resorted to by some as often as every seven, and, by those obstetricians who use them least, as often as once in "250" labors; in England and Ireland only one in six or eight hundred is thought suitable for their application. Thus we find Dr. Seibold, of Berlin, who uses a long instrument, according to the valuable tables furnished by the last American edition of Churchill's Midwifery, had recourse to forceps once in every seven cases—and *craniotomy* only once in 2093 cases. Dr. Collins, who recommends the short forceps, employed it only once in 617 labors, and resorted to the graver operation of perforation once in 141 cases, being nearly $4\frac{1}{2}$ times as often as he used the forceps. These men are among the very first practitioners in their respective countries; and yet we find the celebrated Irish accoucheur resorted to *craniotomy* 14 times as often as the no less distinguished continental physician whilst the latter delivered by forceps 8 times as often as the former.

Nor are these by any means rare examples. Drs. Clarke, Ramsbotham, and in short almost all English writers advise that the forceps be used *only* when the head has descended so "that an ear can be felt," &c. deeming it proper to resort to them but once in 700 labors, or thereabouts. Whilst the best French accoucheurs apply the forceps at least three or four times in the same number of cases, and with a corresponding infrequency in the number of cases of *embryotomy*. Is not this wonderful difference in the frequency of using this instrument to be ascribed in a great measure to

the difference in its form as used by these gentlemen? That the highest proportional frequency may not claim imitation, we will admit. But is it not apparent that there may be danger of falling into the opposite extreme and that hyper-caution, and delay, may beget the necessity, often, for a more frequent resort to craniotomy? In this country, we find both the long and short forceps in use, as the practitioner chanced to adopt as his text-book, and guide, a French or an English author.

As the long forceps only can be applied when the head is high in the pelvis, and may be used equally well at the inferior strait, I am inclined to recommend, with most practitioners at least, its exclusive use. By confining himself to one instrument, the operator acquires greater familiarity with it, and becomes more expert in its application. Besides, as the short forceps are in no respect better for seizing the head, even in the inferior strait, they are entirely unnecessary, and motives of economy would induce many persons to dispense with them altogether.

The form of the long forceps, as we find it scattered through the country, varies greatly, as does also its weight. Most of those which I have examined are bungling modifications of Dewees' improvement of Baudelocques', or of Seibold's. Many of them, made by indifferent mechanics, are much more exceptionable than the original patterns. It is not a matter of surprise that most prudent practitioners are disinclined to resort to this degenerate, unmechanical instrument, or that its use should so often be followed by injury to the structures of the mother, or that the operator should be baffled in his efforts to secure the presenting part of the child between its thick and ill-shapen blades, and perhaps utterly fail to close and lock them.

It is true, there is no apparent want of variety in the form of this instrument, as may be seen by examining the numerous plates furnished by the modern obstetrical publications. The difficulty seems rather to have been, that each man, conscious of its general defects, has fastened upon some one point, and losing sight of everything else, has strenuously urged the adoption of his fancied or real improvement upon that particular portion of the instrument, attaching this improvement, or modification, very likely to one otherwise so imperfect as to preclude its use. Others, again, have recommended an instrument, the general form of which was admirably adapted to fulfil the end in view, and then rendered its application difficult by leaving, through want of observation, or national prejudice, some important point defective. Thus, Moreau, who gives the cut of an instrument combining in my opinion, more excellencies than any other, unites the blades by means of a "*pivot*," which requires that they should be adjusted with

the utmost accuracy before they can be locked, and making it exceedingly difficult of application.

Prof. Hodge has pursued a different course, and one which must, by persevering observation, eventuate in the perfection of the instrument. He places before him all the different forceps in use, and selects from each its peculiar merits, combining them in one. But in an effort to improve his "eclectic forceps", and continue the shafts of the blades in contact, and prevent the vulva from being put upon the stretch unnecessarily early, he has made the angle so acute, when the blades are closed, as to require that its weight should be greatly increased in order to secure the proper power at the distal extremity of the blade. His instrument has also other minor defects which are susceptible of improvement. The blade is too wide more especially at the heel of the fenestrum, the inner edge of the fenestrum is unnecessarily thick, the shoulders of the notch in the female or mortise blade are too abrupt, thus making it difficult to lock, the handles are smooth and cannot be securely grasped, &c. &c. It is however the least exceptionable, in my humble judgment, of any American instrument. Indeed, were the profession generally in possession of an instrument combining as many useful qualities, and as well adapted to administer relief to the suffering female, as the one recommended by the Professor of Obstetrics in the University of Pennsylvania, I should not deem it necessary to obtrude this notice upon the medical public. But, unfortunately, this is by no means the case. Those in use in this section of the country are exceedingly defective. Even Dr. Meigs, of Philadelphia, still, I believe, insists on using the long forceps, without the second or lateral curve, which must seriously impair its usefulness for application at the superior strait, as it cannot conform to the natural curvature in the passages, and must endanger the perineum from pressure.

The instrument which I have used during the last few years is a long forceps, and is considerably curved upon its lateral aspect. It measures in its entire length (*a a* to *b b*), conforming the line measured to the curvature of the blades, $17\frac{1}{4}$ inches. The blades and their shafts to the pivot being about 10, the handles about $7\frac{1}{2}$ inches. The blade (*a* to *d*) is $6\frac{1}{2}$ inches in length, and 7 lines at its narrowest point (*d*), and $1\frac{7}{8}$ inches at its broadest point (*e*). The fenestrum is one inch at the widest part (*f*), and gradually diminishes to less than one half of an inch at the heel. The inner or fenestral margin of the blades are ground down so as not to exceed one sixteenth of an inch in thickness, the width (*e* to *f*) being scarcely 5 lines,

and not exceeding one line in thickness at its periphery (*e*), being considerably thicker in the centre, (midway between *e* and *f*).

The shaft of the blade is scooped out considerably toward the pivot, upon its inner surface, beyond the termination of the fenestrum.

The points of the blades when the instrument is closed (*a* to *a*) are but 5 or 5½ lines apart, and at the widest point (*g* to *g*) they are 2 inches and 7 lines apart, on the upper or concave surface; whilst on the lower or convex surface, they are slightly more expanded.

The shafts of the blades (from *d* to *c*) approach each other rapidly, but not abruptly.

The blades at the centre of their points (*a*) deviate 3½ inches from the strait line in forming their second or pelvic curve. The entire thickness of the closed instrument at their point of junction (*c*) is less than six lines.

They are united by means of the German notch and button, or screw, which is counter-sunk in the female blade. The edges or shoulders of the mortise, or notch, are rounded, or pared off for four or five lines on either side, so as to incline the pivot to slide into the notch. The mortise is not carried very deeply toward the opposite side of the blade, which would greatly diminish its strength at this point.

The handles diverge in the centre (*h h*) to 1½ inches, and each is expanded or flattened to ¾ of an inch in width at that point, and well roughened on the outer surface, so as to be securely grasped. The points are contracted again, curved and polished, and will separately answer the purpose of blunt hooks. The one encloses a perforator, and the other a sharp hook or crotchet. Each is made oval, and the sheath enveloping it is secured by means of a small transverse screw, which may be removed by the point of a penknife or scissors. The entire instrument is made of the best German or cast steel. Mr. J. Seifert of this city, a native of Berlin, who makes the instrument very well, prefers the former as being less liable to break.

Here it is perceived we have a very light and graceful instrument of sufficient length to seize the head at the superior strait without difficulty, leaving the lock entirely free from the external organs. The curve is such also as to conform to the direction of the passages, without exerting injurious pressure upon the perineum. The shafts of the blade approximate so as not to distend the vulva before the descent of the head. They incline, however, so gradually as not to diminish their power, as is the case with the instrument of Dr. Hodge. By the politeness of Dr. W. Cary of

this city, a pupil of Prof. Hodge's, I am enabled to compare the instruments, and I find that although the forceps of Prof. H. are three ounces heavier, they spring or yield more, being more dilated, by the same amount of force applied at the distal extremity of the blade than those just described.

Besides, the claw or blade of the latter is nearly an inch narrower, and hence it is introduced with much greater facility. It will be found that the concavity of the fenestrum, *levelling* off the inner edges of the blades, will render it better adapted to fit accurately the parietal protuberances, and prevent those salient points from being injured or indented by the sharp angles usually found in this situation. Moreover, this is the widest part of the fetal head, and the surface to which the fenestrum is ordinarily applied. And if this margin of each blade be two or two and a half lines in thickness, as is the case in many instruments, the pelvic space which will be requisite for delivery, will be three lines less in using one than the other form; or, which is equivalent to the same thing, the amount of compression of the fetal head must be three lines more in consequence of unnecessary thickness of this edge of the instrument.

One of the difficulties in the application of the forceps consists in uniting the blades, after they have been carried to the requisite height. In the instrument represented, this end is greatly facilitated, slightly lessening the weight at the same time, by cutting away the abrupt shoulders to the mortise, into which the screw easily glides, whenever it gets within these inclined planes.

Again, who ever has been compelled to hold on to well polished round steel handles for any considerable time, will readily appreciate the comfort, as well as sense of security which a roughened and expanded surface must afford. It adds but slightly to the weight of the instrument to increase the length of the handle, and bend it so as to form a blunt hook, and may be a source of considerable convenience. A very good perforator may be inserted into the extremity of one handle, and a sharp hook into the other, and though they may not be of the most approved patterns, they answer very well, should the work of destruction become unavoidable. This arrangement is more important in country than city practice, as one instrument is much more portable as well as more economical than four.

At first I made the end of the handle round and united the perforator, which was of course small and round or triangular, like a common trochar by means of a screw as recommended by Moreau. But by flattening the extremity of the handle, and then securing the shield to the sharp point by

a transverse pin or screw, I have been able to obtain a perforator of much better shape, and which, by rotation greatly increases the size of the orifice made in the fetal skull, and that, too, without increasing its weight. It has been suggested that roughening the centre of the handle must render it liable, when used as a hook or perforator, to irritate the soft parts of the mother. But no operator, I apprehend, would ever use it for this purpose, if smooth, without carrying his finger up beside it. Being careful then to oppose the centre of the roughened side to the hand, would effectually protect the woman from injury, and obviate this objection.

I do not suppose that the instrument as represented is insusceptible of improvement. But it is claimed that it can be used with much greater care and safety than those to be found in the shops of the cutlers in this section of country. It is very light, may be applied at the brim, in the cavity, or at the outlet of the pelvis, by simply varying the direction of the handles. It is less likely to do injury to the child and maternal organs than those in common use, and were it, or some better form than those now in use, generally introduced, much of the repugnance on the part of the Profession to the early employment of this instrument would be overcome; the delay and suffering of the mother would be thereby lessened, with increased safety to her structures, and far fewer children would be subjected to destructive operations.

Yours, &c.

BUFFALO, April 15, 1849.

JAMES P. WHITE.

ART. II.—*Medical Notes and Observations.* By CALEB GREEN, M. D., of Homer, N. Y.

If the following, which are a few of the items of medical experience and observation which have been noted in my case-book within a few months back, will be of any interest or value to the medical public, I shall consider myself amply rewarded for having recorded them.

Variola Vaccina, commencing 12 days after Inoculation.—June 1st, 1848, I vaccinated Francis S., æt. about 47 years. After waiting the ordinary time, the virus did not produce its usual effects, and I suspected, of course, that it was not good, or had not been properly introduced. On the 12th day, however, the papular stage commenced, and proceeded to the well formed vaccine pustule, attended with strong febrile symptoms, and considerable swelling of the arm.

Case of Mrs. O.—July 17, 1848. Was called this evening to see Mrs. O; a lady æt. 35 or 40 years, of the nervo-bilious temperament, who had

just experienced a sudden swelling of the upper lip, particularly of the left side, with active congestion of the mucous membrane of the left compartment of the nose. Lancinating pains darted from the lip toward the left eye, and there was a prickling sensation of the tongue—whether of the whole of that organ, or only one side, I neglected to note. She assured me that these symptoms all appeared within three or four minutes from the commencement of the attack. She had been at work in an outbuilding, but not exposed to a current of air. The tumefaction was not painful, but felt inconveniently. I did nothing for it. July 18th, the swelling and other symptoms have disappeared. In what system of nosology has this combination of symptoms “a local habitation and a name?” Is this one of the protean shapes of hysteria?

Coffee.—Mrs. A. informs me that she drinks coffee for the purpose of preventing constipation. She suffers much from menorrhagia and headache. Pereira (Mat. Med. and Therap., vol. 2, p. 462) refers to two cases in which it operated as a purgative. He says, however, that it is apt to have a constipating effect on those unaccustomed to its use. Dr. Dick also (Bost. Med. & Surg. Jour. vol. 36, p. 332) says it sometimes constipates. Is coffee a *stimulant* or a *sedative*? Pereira (op. cit. vol. 1, p. 94) says that it is a tonic and stimulating drink. Dick (Bost. Jour. loc. cit.) says that it exhilarates and invigorates without hurtfully stimulating; that it has a peculiar effect on the cerebral organs, promoting in a more remarkable degree than, perhaps, any other drink, the normal action of the intellectual and imaginative faculties. I have watched its operation on myself, and find that a tolerably strong decoction immediately excites the action of the heart.

On the other hand, Billing (First Prin. Med. p. 101) contends for its sedative qualities. His error is committed by considering the action of *tea* and coffee as identical, whereas, although they both produce wakefulness and mental exhilaration, the one is a cardiac sedative, and the other a cardiac stimulant. I can, by no means, agree with Billings' view of the *modus operandi* of tea and coffee in producing cerebral excitement, even should I admit both of them to be sedatives. His opinion is, that they operate by counteracting the plethoric state of the brain by virtue of cardiac sedation. If this were true, tartarized antimony should do the same, as well as many other medicinal sedatives, and blood-letting. The truth is, both tea and coffee are cerebro-spinants or “medicines which produce or prevent sleep, or which affect the intellectual functions, &c.,” (Pereira *op. cit.*) while, at the

same time, their action on the heart and arteries may be diverse. The peculiar principles of both tea and coffee are developed during torrefaction.—(See *Brit. and For. Med. Chi. Rev.*, July, 1848, and *Pereira op cit.*)

Great Nervous Impressibility from severe Hæmorrhage.—July 3d, 1848. Mr. Herbert informs me that he can predict a storm two or three days before its arrival, by his sensations, and that this faculty has existed only a year. This condition of the system he attributes to the loss of large quantities of blood, in consequence of severe injuries he received a year since. Never felt the effects of an approaching storm before that severe hæmorrhage. Cannot bear warm weather now as well as before.

Tradescantia versus the Venom of the Rattle snake.—July 12th. A friend communicates to me the fact that the wiseacres of Wisconsin pretend to cure the bite of the rattle snake by the root of the tradescantia or spider lily.

Metastasis of active Congestion of the Bronchia to the Fauces and Nasal Cavities.—July 6th, 1848. Mr. M. related to me his case, which he termed "a cold." Said he yesterday suffered from great "soreness of the lungs." Soreness particularly extending down the sternum, and somewhat throughout the chest generally. The respiration was painful; cough dry; thought he had absolute inflammation of the lungs. Was in much distress from this condition last night when he retired, but fell asleep, from which, in the course of the night, he awoke suddenly, experiencing a most delightful sensation of relief from any abnormal pulmonary symptoms, but found the fauces and nasal cavities, which, on retiring, were perfectly free, in a state of active congestion—that he had "a cold in the head." This state of things still continues; lungs free. July 8th, says he is entirely free from his cold; has pursued no treatment. A slight epidemic of influenza is now prevalent, and this is probably a case of it. He was wholly unable to account for the cold. I ought to have mentioned that he suffered with *hemicrania*.

Tincture of Nux Vomica in Cephalalgia.—June 7th, 1848. In conversation with my friend Dr. Hawley, of Ithaca, on the subject of hobbies and specifics in medicine, he observed that he rode one hobby, and that was the saturated tincture of nux vomica. He uses it freely in those cases popularly termed "sick headach," and also in those forms of cephalalgia which appear to be of a decidedly neuralgic character. He remarked that he had very gratifying success in the treatment of these affections with

this agent. During the paroxysms he usually administers from 15 to 20 drops, which generally gives relief; after which he often continues the tincture in doses of 10 or 15 drops three times a day for two or three days. He assures me that the first sometimes produces permanent relief; and the repeated doses frequently protect the patient almost wholly from future attacks.

Since the above date I have employed the tincture in several cases of cephalalgia, and with various success. The following is my formula for the tincture. *R. Nux vom. pulv. 3i; spta. vin. rect. 3iv. M. ft. tinct.*

June 15. Mrs. Blaque has been afflicted for several weeks with a severe headach, which is evidently sympathetic of gastric and uterine derangement. Gave her, this P. M., 15 drops of tr. nux vom. She said that within ten minutes after taking the medicine, she had a "queer sensation all over her," that her head felt airy and light, and "as though she wanted to fly away;" but did not describe the symptoms as decidedly unpleasant. The headache was relieved. June 16, this morning she remarked to me "how good it seems to be free from headache! My head is clear, and does not ache at all." For five or six weeks previously she had an almost *constant* headache during the day. June, 23d, says her head feels very well, and has had so much relief from the remedy that she wants a vial of it for future use, if necessary. June 29, says she now has severe pain in the back when she does not have it in the head. Took the tincture with relief.

June 28. Mrs. P. has been complaining for some time of a peculiar dull congestive headache, attended with heat and redness of the scalp, just anterior to the "organ of firmness," covering a space an inch and a half, or two inches in diameter. The pain extends over most of the head, but is more severe in the upper and anterior portions. There is sometimes amaurosis and nausea. She is of a thin habit, pale and habitually constipated. This morning was suffering much with headache, amaurosis, loss of appetite, &c. Gave her 20 drops of the tincture, and in fifteen or twenty minutes her head was greatly relieved and appetite improved. Had continued pretty well during the day.

July 3d. Mrs. N., æt. about 35, of the nervo-bilious temperament, sent for me about 8 P. M. in great haste. Found her suffering from severe cephalalgia, lancinating pain over the right eye, with great restlessness, nausea and vomiting. Gave 20 drops of the tincture. In twenty minutes became easier, nausea and vomiting ceased, and she rested very well during the night, which was quite contrary to her expectations. July 4th,

complains of some heaviness of the head, but is otherwise free from pain.

July 18. L. S., *set.* about 13 years, had suffered for two or three months with a dull headache every day—continuing nearly through the day. I have tried medication with blue mass, laxatives, vegetable tonics, &c., without any marked amendment. Three or four weeks since, I commenced giving him the tincture of *nux vomica*, soon after which he began to amend. He took ten drops twice a day for 10 or 15 days. He is now entirely free from headache. He is of the *nervo-bilious* temperament, and his father, and some other members of the family, suffer from the sick headache.

March 7th, 1849. Rev. Mr. F., of the *nervo-sanguine* temperament, suffers frequently from headache, with nausea. The *cephalgia* is sympathetic of gastric disturbance, and is principally characterized by sharp pain over the right eyebrow. Sometimes extending to the temporal region. He has taken the tincture with some relief, although it sometimes leaves that enlarged, light sensation in the head, alluded to in the case of Mrs. Blaque. He takes it in doses of 10 or 12 drops, repeated not oftener than once a week, and it operates as a laxative. This, it will be remembered, is a favorite remedy of the *homœopathists* for constipation, but, in order to have its due effect, it must be given in something more than the “diluted starlight” doses.

† In the *Amer. Jour. Med. Science*, Jan., 1849, p. 34, Dr. Porter relates a case of headache attended with indistinctness of vision, numbness of the right side of the tongue and right arm, occurring in a patient on the third day after confinement, in which there were signs of debility rather than of congestion, and in which he administered *tinct. nux vom.* with evident happy effect, not only on the local symptoms, but as a tonic to the stomach. He also alludes to some other cases in which these *amaurotic* symptoms, succeeded by headache, and this by numbness of the tongue and arms and nausea, suddenly supervening during gestation or soon after labor, and always in connection with gastric disturbance, were promptly relieved by tincture *nux vomica*.

Fracture of the Clavicle.—Mr. Herbert, a teamster, on the 29th of May, when near Syracuse, thirty miles distant, fell from his wagon, struck upon his left shoulder, producing a fracture of the clavicle, of which latter fact however, he was not at the time aware, although the arm was useless, and he was unable to raise the hand to the head. He put his arm in a sling, went on to Syracuse, obtained a load of goods, and returned the next day. On the 31st he came to me for examination, when I found a fracture at the

usual point, the external extremity of the internal curvature of the clavicle. I immediately reduced the fracture, and dressed it with a combination of Boyer's and Fox's apparatus. Notwithstanding the most careful and firm adjustment of the apparatus, a displacement of the fragments to the extent of two or three lines, was not avoided. The patient wore the confining apparatus about three weeks, when he removed it, leaving only the sling. The callus had much diminished, but I still advised him to keep the parts confined. He did not, however, and at the end of five weeks took off his sling, put on his coat and went to work, contrary to my advice. The fracture remained united and sound.

! *Collodion*.—I need not detail the process of preparing this new adhesive agent, as it is given in full in the number of this Journal for August last. I will merely state that I find by experiment no advantage in macerating the cotton in the acids more than *thirty minutes*. I have allowed it to remain *twelve hours*, but it was not superior to that exposed to the acids only half an hour. I find also that the ether should be perfectly fresh in order to make a solution of the prepared cotton. The bottle containing it should not be frequently opened, and should be kept very tightly stopped. Without these precautions, practitioners will fail in the preparation of collodion.

I have used this agent repeatedly in *burns* and *scalds* with the most prompt and happy effect. Where, however, the cuticle is abraded and serum is exuding, the collodion will not adhere. In *wounds*, after the arrest of hemorrhage, it has been used with excellent success. Water dressings can be used more freely than when other modes of adhesion are practiced, but in the end the collodion straps will loosen. In *herpes labialis*, *acne*, and some other *cutaneous eruptions*, I have employed it with marked advantage. In *chilblains* I have used it with the most decided success. In one case the patient had her feet for some time exposed to severe cold, which produced an erythematous inflammation of several of the small toes. They were swollen, red, tender, and itching. I completely enveloped them in a thick coating of collodion, and the contraction which took place on its drying produced so much compression of the vessels, that the toes were as pallid as frozen ones. The pain and itching were immediately relieved, and in twenty-four hours these members were nearly well. I have cured *pernio* of the heel, also, with this article, but I do not believe it a panacea for all cases of chilblain, even in its erythematous stage.

Observations on the Etiology of Dysentery.—Our village in August and September last, suffered from the prevalence of dysentery, but it was in the main confined to a small portion of the village—the northern third of Main Street. This street runs nearly parallel with the river, and on an average, about thirty rods from it. The river in the upper third of the village is converted into a mill-dam, which skirts the village lots on the east. On the eastern side of the pond, a hill rises pretty abruptly to the height of three or four hundred feet. The pond, late in the summer, becomes in a measure stagnant, from deficiency in the supply of water. It was just in this portion of the village that the dysentery first made its appearance and prevailed most extensively. Indeed the prevalence and virulence of the disease was in a very great degree limited by the extent of the pond. Hardly a house escaped on both sides of the street opposite the mill-dam. In some houses several were sick at a time, and most of the fatal cases—which, fortunately, were but few—occurred in that district;—in fact but one death, that I now recollect, occurred out of it, and that was on Factory Street, which joins the upper part of Main at an acute angle opposite the lower end of the pond. The families in this part of the village, with perhaps a single exception, are well fed, clothed and regulated;—in short, they are the “up town” class, and none of the causes of malignant fever or dysentery existed in their domestic arrangements or habits. A few other cases were scattered over the other portions of the village and town, but were mild when compared with those alluded to. The intelligent reader can draw the proper inferences in reference to this matter, in which he may be assisted by consulting Dr. Gayely’s article on the “Etiology of Intermittent and Remittent Fevers,” in the January No. of the Am. Jour. Med. Science, p. 66–67.

Post Mortem Appearances of Dysentery.—The subject of this note—Wm. R. R. æt. 18 months—was attacked on the evening of the 29th of August, 1848, with diarrhoea of a bilious character. I did not see him until the next day at 5 o’clock, P. M., when I found him very restless, with frequent but not copious stools, consisting of a greenish mucus, with a little blood. There was considerable tenesmus at each evacuation. After the first day of treatment the discharges did not present any blood. On the 4th and 5th days of the disease the evacuation had a feculent portion of a dark brown color, somewhat resembling coffee grounds. Cerebral disturbance began to manifest itself on the third day, and for the last three days the patient was for the most part comatose. The brain was very

largely developed when compared with the body. He was cutting some of his teeth. On the fifth day he passed the chalky urine spoken of by Coindet. He died on the morning of Sept. 7th.

Autopsy, 24 hours post mortem.—Dr. Bradford assisted in the inspection. The abdominal and pelvic viscera only were noticed. The position of the organs was normal. The stomach, liver, and small intestines, were healthy in appearance, with the exception of the last five or six inches of the *ileum*. From this point to the lower end of the rectum the results of inflammation were very manifest. The muscular coat was much thickened, and the mucous coat nearly covered with an exudation of lymph which was yellowish in the upper portion of the colon, but had a white and “curdy” appearance in the rectum. Between the patches of lymph the mucous membrane was of a dark color. There was no ulceration. The meso-colon and meso-rectum were morbidly vascular. The kidneys and bladder were healthy in appearance.

Singular Effects of Hydriodate of Potash.—In July, 1848, I gave Mr. William Dalrymple, farmer, a solution of hyd. pot. of about twenty grs., to the ounce of water, and directed the use of a teaspoonful twice a day. He took the first dose, and in about five minutes afterwards began to experience feelings of intoxication. He remarked that his head felt large, and he “felt large all over;” had vertigo and experienced the usual reckless feelings of inebriation. He is satisfied that this was the result of the hyd. pot. Since, the same symptoms were excited on a repetition of the dose. I have never before observed the effects of hyd. pot. above referred to, nor met with the remarks of those who have witnessed them. headache, watchfulness, and other symptoms indicative of the action of the salt on the nervous system, have been noticed by Drs. Clendinning and Wallace.

Nitrate of Potash alias Nitrate of Silver.—Two or three months since I purchased a stick of “pure” Nit. Silver of our village druggist, who usually keeps medicines of excellent qualities. I observed that it had not the external appearance which that salt usually has, it being *very* white and easily broken down into small irregular crystals. I used it several times for conjunctivitis, but without the usual effects of Nit. Arg. or rather no effect at all. I was led to examine the article more carefully, and found by taste, burning, and chemical tests, that it was a *very* pure specimen of *nitrate of potash*—not a trace of silver to be detected. The other sticks

in the bottle from which this was taken, consisted of *pure* nitrate of silver—as good as the crystallized salt.

Remarkable Case of Abstinence.—In Dec. 1848, I visited, in consultation with Drs. Goodyear, Hyde and Bradford, a Mr. Gifford, of Groton, Tompkins Co., who had been insane for several months, but for the three weeks previous to our visit—laboring under the impression that his friends wished to poison him—had eschewed all kinds of solid nourishment, and had taken nothing into his stomach during that time but cold water and snow. He usually drank the water twice a day, drawing it himself directly from the well, but after the fall of snow he resorted to that. He had not manifested any inconvenience or debility from this abstinence until the afternoon of our visit, when it was evident that he had been using a larger quantity of snow than usual, and we found that he had vomited a moderate quantity of watery fluid tinged with bile and a little blood, and was manifesting some internal pain, from which, however, he recovered before we left. He was a large muscular man, and his strength and flesh did not appear to be at all diminished. By our advice a stratagem was resorted to, in order to induce him to leave his quarters and take food. It was successful. He went off with a neighbor, and after an abstinence of *thirty three days* he took some *toast water*, and on the thirty-fourth, some toast, and after that took full and regular meals, without any apparent inconvenience. He relapsed, once or twice, into his fear of poison, but was soon induced to resume his meals. There was no apparent loss of strength, or flesh, at the end of this long fast. He is now in the Asylum at Utica. Some years ago I knew an insane patient in Onondaga Co., who abstained from food entirely for twenty-one days, and terminated the fast by eating a tin pan full of snow.

But my budget is full. I may send you another of "the same sort" "in the course of time."

HOMER, March, 16th 1849.

C. GREEN.

ART. III.—*Report on the Memoirs of Drs. Miquel, of Ambrise, and Stern, of La Haye, on a Mode of Tamponing the Genital Passage in cases of Uterine Hemorrhage in Pregnant Females.* Commissioners,—FLOURENS and ANDRAL, VELPEAU, Reporter. (Translated by JAMES BRYAN, M. D. Professor of Surgery in Geneva Medical College, President of the College of Physicians and Surgeons of Philadelphia.)

The Academy has confided to Messrs. Flourens, Andral, and myself, a work of Doctor Miquel, describing a new method of remedying the dangers of the implantation of the placenta on the neck of the uterus, during gestation. It has also submitted to us a dissertation of M. Stein on nearly the same subject. The object of these authors appearing to be about the same, and the means which each has contrived, very analagous, we have concluded to consider both in one report.

Gestation exposes certain females to a species of hemorrhage, the cause of which is found in the implantation of the placenta in the vicinity of the neck of the uterus. This hemorrhage, almost inevitable, because it is connected with the anatomical arrangement and physiological development of the organs, is so dangerous, that it not unfrequently causes the death of both mother and child, in spite of the most assiduous and patient attention. Since the commencement of the last century, the time when accoucheurs turned to it their special attention, many means of cure have been suggested; yet all practitioners have continued to sigh over the inefficiency of art, in this matter. It is this, which gives interest to the works of Miquel and Stein. Both these authors propose remedying this species of hemorrhage, by means of the bladder of an animal, introduced empty into the organs, and there distended by a fluid, water, for example, or air, in a manner to produce a large tampon.

Before proceeding farther, we should say, that the *bladder* employed in this manner, is not an absolutely new remedy. It was mentioned in the last century by several authors, Walbaum, Schlichting, Lenay, Basedone and others. In our times by Rouget, Galbiati, and Verdier, among others. But it is a means which has not remained in practice: Miquel and Stein present it in another point of view, as well as under another form, and accompanied with arguments which their predecessors did not have.

Although the bladder has been proposed by both authors, the remedy is different in the hands of each. For this reason we will examine them separately.

Report on the Process of Stein.—Stein's object, was to establish a compression on the free portion of the uterus, in the upper part of the vagina,

and also to oppose an obstacle to the passage of the blood, from the internal surface of the neck of the uterus; or from the external surface of the placenta. For this, he made use of means, thus arranged: He procured the bladder of a goat or sheep, prepared, and furnished with a solid ring; a metallic canula, open at both ends, widened like a funnel at the lower end. Armed with a lateral facet, screwed upon the upper part of the bladder, which was introduced, empty, to the upper part of the vagina. Having blown it full of air, or filled it with water, by means of a syringe, it only remained to close the facet, open up to this time, to complete the operation.

In this way, we have a body enlarged to any given size, which fills exactly the vagina, without fatiguing the parts so much as the other tampons usually employed. As the bladder filled with water may be, other things being equal, easily compressed, it fills without irritation all the inequalities of the parts; while the sides of the neck of the uterus, for example, depressing it centrally, are pressed all around by a species of soft circular pad, which fills the upper cavity of the vagina, and compresses that portion of the uterus, which is ordinarily in the vagina, at the time of labor.

The weight of the fœtus and its dependencies, will present an obstacle to the hemorrhage, in supporting itself upon the placenta from above downwards, while the apparatus of Stein resists from below upwards. The same may be said of the resistance offered by the parietes of the uterus, and their contraction, whether the labor has commenced, or the uterus be in its normal condition.

In order to understand the indications of this means, it must not be forgotten that the blood comes from the interior, from the vicinity of the orifice of the uterus, and that it runs from that part because the placenta is found in the lower part, and not above. Indeed, if the hemorrhage occurring from any other cause, came from some other part of the uterus, the means of which we speak, instead of being useful, might be very dangerous, preventing the blood from passing outwards, and retaining it in the interior, without preventing the hemorrhage from the veins of the mother. When hemorrhage occurs from the implanting of the placenta on the neck, however, tamponing the vagina, is very beneficial. By this means we close the orifice of the organ, and as the placenta is immediately above, it follows that the vessels are compressed, by the fœtus on one side, and the bladder on the other.

All obstetricians agree, at the present day, on this point. In this matter, then, Stein need fear no opposition from practitioners, while he does not add

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to the knowledge we already have. But the end which is proposed by his process, differs from those already admitted, in the following manner: To tampon the vagina, in females with hemorrhage, we introduce charpie, and increase the quantity either alone, or through a bag of fine muslin; sometimes instead of charpie, we use tow-carded flax, or pieces of old linen, or even a handkerchief. Some use a roll of cloth, or introduce it in pieces.

Such a tampon is certainly much better than nothing, for according to an old axiom in bad cases, it is better to use a doubtful remedy than nothing. In general, however, these tampons are insufficient; they become lumpy, of unequal consistence; they press too little or too much; now against the urinary bladder, now against the rectum; they press more against the neck, than against the neighboring parts of the uterus. They imbibe the blood, become loose, and are soon displaced; and thus act but very imperfectly in arresting the hemorrhage.

With the apparatus of Stein, the foreign body used as a tampon, is depressed on the surface very easily, and adapts itself to the inequalities of the parts; pressure is made against the uterine region, or the flowing blood, in an equal and continuous manner. We can, at pleasure, and without pain, augment or diminish the volume, or the density of the hemostatic bladder. As this bladder is impermeable, the blood does not penetrate it, and hence there will be no deception in its use, as in the tampons of linen.

We must not expect, however, that the dangers of hemorrhage, from the implantation of the placenta on the neck, will be thus easily overcome. If, instead of being in the vicinity of the neck of the uterus, the torn vessels are some distance beyond, the apparatus will not stop the hemorrhage any better than the others.

All that we can expect from it is, when tamponing is indicated, this method is the surest, the easiest, and the least troublesome that we have, and that, always, when the tamponing is to be applied only to the interior of the vagina. We will see, soon indeed, that Miquel introduces it, even to the interior of the uterus.

Stein closes his memoir, with a dissertation on the causes of the implantation of the placenta on the different parts of the cavity of the uterus, and the mechanism of the hemorrhages which are the result of this implantation. The reflections of the author, tend to establish these two facts, that the fixation of the placenta on one or other point of the uterus, and the appearance of hemorrhages, depend upon a species of anormal contractility of the fibres of the uterus. But what he says on this subject, being but

the result of simple theoretic views, unsupported by experience of precise observation, does not appear to us worthy of occupying much of the time or attention of the Academy.

In closing, we would say, first, that the hæmostatic process proposed by Stein, is useful, and should be preferred to ordinary tamponing, in cases of hemorrhage from the implantation of the placenta on the neck of the uterus. Second, that the bladder indicated by this physician, and employed by others, has not been recommended, either under the same form, or with an object exactly the same. Third, that the entire work of Stein, is one worthy the esteem and approbation of the Academy.

It should be added, in conclusion, that this gentleman gives the credit of the invention of the proceeding which he extols, to Wellamberg, his master, a distinguished accoucheur of La Haye. The description has even been published for some twelve years, in the country journals, and he published this memoir, only to describe an improvement which he has made to the apparatus, and to obtain the opinion of the Academy, on his entire work.

The conclusions of this report were adopted.

Report on the proceeding by Miquel.—Struck, like other physicians, with the great dangers of hemorrhage, from implantation of the placenta on the neck; convinced by experience, of the uncertainty of the various known modes of tamponing; Miquel attempted to use the bladder, in a manner quite new. It is not, indeed, in the vagina, but in the interior of the uterus itself, that this physician establishes his system of compression.

The apparatus of Miquel is composed, first, of a pig's bladder, second, a metallic canula, from 18 to 20 centimeters long. Third, a double ribbon, to fasten the body of the bladder on the canula, and to fix at another part, the neck of the bladder to the back of the canula. Fourth, a baton with a blunt extremity, to sustain the summit of the animal pouch, while it is introduced; and five, a species of little baton, on which are fastened the two ties just mentioned.

To apply it, the female is placed in the ordinary position for artificial labors. Carried on the finger, or by the aid of a speculum, up to the neck of the uterus, the bladder must be introduced, either along side of (or across) the placenta, if it occupies the center of the orifice, or between the ovum and the parietes of the uterus; the mandrin is then withdrawn; air or water is then injected by means of a syringe, so as to distend fully the pouch thus placed upon the neck. The external opening of the canula is

then carefully closed by a facet, if there be one, or by means of a cork. The ends of the ties which fasten the bladder, near the middle, to the canula, and of that which closes the external extremity, are then fixed on the little baton, mentioned above, to prevent all kind of slipping. These ties, and the stick which supports them, are made to produce traction from above, downwards, to compress all the internal surface of the summit of the uterus, better than the head of the fœtus can do it.

We thus understand the mechanism of the tampon apparatus, and the object aimed at, by Miquel. By the method of Stein, compression from below, upwards, does not meet with sufficient resistance from the ovum, to satisfy the practitioner. Limited by adhesion of the vagina, the action of the Holland Physician's tampon, is not sufficiently extensive to cover the whole surface from which the blood flows. Its action being established outside of the uterus, may not, perhaps, induce contractions; at the same time, it does not prevent a collection of blood in the uterus, or even in the coverings of the fœtus.

By the method of Miquel, on the other hand, all the indications are met, and several inconveniences avoided. Once in place, the pouch prepared by this physician may take almost any size or tension, at the will of the surgeon. In drawing downwards, we are sure of applying pressure, either directly, or through the medium of the placenta or the membranes, to the vascular orifices. This compression may extend to the fourth, or third of the uterine cavity, and will certainly extend beyond the limits of the bleeding disk, representing, to a certain extent, a second head of the child. The bladder thus placed and distended, has all its efficacy. We see, on the contrary, its action is augmented by the contractions of the uterus, under the influence of labor. It is thus evident, that this manner of tamponing is, at least, more efficient and more formidable, than that of Stein; more efficacious, because, well done, it inevitably arrests the hemorrhage, while the other method frequently fails; more formidable, because once in place, the internal tampon will excite, without doubt, uterine contractions, and premature labor, which will not necessarily follow the application of the vaginal tampon.

We must, then, in this matter, establish a distinction. Before the seventh month, while the viability of the fœtus is yet doubtful, if there be no urgent necessity, on the part of the mother, to finish labor at once, the plan of the physicians of La Hage merits, it appears to us, the preference. If, on the other hand, the dangers to the female are very great, or if gestation is so advanced that the expelled fœtus has a good chance of living, we should resort to the process of Miquel.

We may add, that this method is a little more complicated than the other; that the apparatus, to be introduced without danger to the mother or fetus, requires skill and patience; but to men acquainted with the accident, these inconveniences are of little consequence.

Fully to appreciate the value of these resources, one must have witnessed the frightful position in which the accoucheur is placed, in these unhappy cases; one must picture a poor woman, otherwise well, arrived at the seventh month of gestation safely, and who after that, suffers fatally, inevitably, an unceasingly increasing hemorrhage; a hemorrhage which will often destroy both her and her infant, whatever is done, unless, by some mechanical means, the bleeding vessels are stopped. One must, in fine, imagine the painful alternative of penetrating the uterus to extract a fetus, or allowing it to be expelled nearly dead, or in a condition to die, in a few hours; or to tamponise, to preserve the product of conception as long as possible, at the risk of compromising, more and more, the life of the mother, and see a young, and, until then, vigorous female, sink without help. It is for this reason, that Miquel, having suffered for more than thirty years, in an extensive practice in the vicinity of Tours and of Amboise, has proposed the apparatus which we have feebly sketched. The work of the author is the result of an extensive practice; in it, he presents cases which show the uselessness of the ordinary modes of tamponing, and others, which exhibit the efficacy of the plan proposed by himself. Persuaded that this method of tamponing will afford valuable assistance, and that it is, for this reason alone, proper to make it known by considerable publicity, we propose to the Academy to insert the work of Dr. Miquel among the *memoirs of learned foreigners*.

The conclusions of the report were adopted.

ART. IV.—*Lithotomy in a Child two years and eleven months old. Patient under the Influence of Chloroform.* By F. H. HAMILTON, M. D.

This lad was born in Pennsylvania, but removed, with his parents, to Rome, Oneida Co., when he was a few months old. About this time, he became troubled with a diarrhoea, which has continued, with only occasional remissions, to the present time. He has had, also, prolapsus ani, and all the usual symptoms of stone in the bladder.

I operated at Rome, Feb. 10th, 1849, in presence of Drs. Bergen, Bassenger, Blair, Pope, and others, by the subpubic, lateralized mode. After the child was placed upon the table, Dr.——, dentist, held a piece of lint, wet with about one drachm of chloroform, to his mouth. In about three

minutes he became quiet. I then introduced the director, at which moment he evacuated his bowels and bladder, and made some complaint. The lint was again held to his mouth, and in one minute he was in a quiet, natural sleep, from which he did not awake until ten minutes after the operation was completed, and after he had been removed to his bed. The operation was made entirely with a common scalpel-shaped bistoury, and occupied, including the removal of the calculus, (an inch and a quarter in diameter) about forty-five seconds. To the perfect quietude of the child, and the use of but one knife throughout, I ascribe the rapidity with which I was enabled to make the operation. The child gave no sign of pain during any part of the cutting for, or removal of the stone. No artery was cut, requiring a ligature, the moderate hemorrhage which occurred, being easily controlled with a cone of snow. The calculus was smooth, canullated and ovoid; a phosphate of lime, with lithic acid.

One feature of the operation, I record as novel:—while cutting for the director, I kept the forefinger of my left hand in the rectum, and with the end of the thumb of the same hand, I followed each incision to its bottom; and this I continued to do, until the director was reached. This mode of cutting enables the operator to avoid the rectum in the early part of his incisions.

Two weeks after the operation was made, the wound had healed, and the child was walking about.

ART. V.—*Lithotomy in an Adult under the Influence of Chloroform.*
By F. H. HAMILTON, M. D.

James Martin, aged 24, entered the "Buffalo Hospital of the Sisters of Charity," February 20th, 1849.

Martin was born in Nunda, Allegany Co., in this state, and moved from there, when he was ten years old, to Evans, Erie Co., where he has resided until the present time. From infancy he has been afflicted with enuresis. Six years since, he first had indications of the existence of a calculus in his bladder. His health is considerably impaired.

During three days, he was subjected to an absolute diet, and bowels gently cathartacised.

February 24th. The operation was made in presence of the Hospital class. Patient was tolerably, but not completely narcotized by chloroform. The incisions were made by the lateralized mode, with a common bistoury, and completed after reaching the urethra, with a straight, broad pointed, and narrow bistoury. The stone was found so large, that I was compelled,

after ineffectual efforts to crush it, to enlarge the incision through the prostate, after which, it was removed with a moderate traction. Weight of calculus, a fraction over four ounces. Longest diameter, two inches and seven eighths. Longest transverse diameter, two inches. Chemical character, ammonio-phosphatic. No arteries required the ligature, and no accident complicated the operation. The forefinger of the left hand was kept in the rectum, and the thumb followed the wound until the urethra was reached, as in the operation upon the lad. I still think it a valuable modification of the usual mode of procedure.

Patient continued to do well, with the exception of having had an occasional diarrhoea, and an attack of erysipelas on the nose and face, and a slight tenderness of abdomen, all of which yielded readily to treatment, until the 9th of March, two weeks after the operation was made. He died suddenly, in the night of the 9th, without any premonition of the event.

Autopsy.—Bladder thickened, and free from matter or fragments of stone. Peritoneum in lower part of abdomen, covered with lymph, and adherent. Pus underneath the peritoneum, in the loose cellular texture, in every direction around the bladder, but especially abundant below, surrounding the rectum, and forming a considerable depot against the sacrum. No other morbid conditions. I ascribe his death to purulent absorption.

ART. VI.—*Epidemic Cholera: its History, Causes, Pathology and Treatment.* By C. B. COVENTRY, M. D., Prof. of Obstetrics and Medical Jurisprudence, in the Medical Institution of Geneva College. Prof. of Physiology and Medical Jurisprudence in the University of Buffalo.

"Internal sanitary arrangements, and not quarantine or sanitary lines, are the safeguards of nature against epidemic diseases."—FARR.—*Registrar General.*

Buffalo; Geo. H. Derby & Co. Publishers. 1849. 18mo. pp. 119.

This work was placed upon our table, just as the manuscript of the last form of the April number of this journal was about to be committed to the hands of the printer, and we were then only able to announce the fact of its publication. Justice to the work requires a more extended notice, after a careful examination of its contents. Prof. Coventry was induced to prepare this brief, but comprehensive monograph, in consequence of numerous applications for copies of his report on epidemic cholera, made to the Faculties of the medical colleges of Geneva and Buffalo, which was published in this Journal, volume IV, 1848. This report embodied the results of his investigations of the disease, during the former and late prevalence of the epidemic; having been deputed by the Common Council, and

Board of Health, of Utica, in 1831, to visit places which were then suffering from the disease, and, in 1847-8, visiting Europe under instructions from the Colleges of Geneva and Buffalo, to resume his investigations. In addition to these occasions and incentives for observation, the author had ample opportunity for becoming familiar with the phenomena of the affection, and of testing the practical applicability of his views, at the bedside, during the prevalence of the epidemic at the city of Utica, the place of his residence. The present volume, therefore, is not a mere compendium of facts and opinions entertained by the best authorities on the subject, but contains the fruits of his own deliberate examination and reflections, based upon considerable experience in the treatment of the disease. Hence, the practical views enunciated, have all the force to be derived from the author's well known ability as an accurate observer, a sound thinker, and judicious practitioner. As such, we cordially commend the work to our readers, and hope that it may have a circulation commensurate with its claims upon the attention of the profession.

The *history* of the disease occupies the first third of the volume. We pass by this portion, to the second subject, viz, the *etiology*, which, it is obvious, would be the most important subject of all, were we able to arrive at any precise results respecting the nature, source, diffusion, and action of the remote cause, or causes.

That our information on these points is infinitely less in amount than could be desired, and, in character, is inferential and hypothetical, rather than demonstrative, must be admitted; but this remark will equally apply to the etiological information we possess of many other diseases, especially epidemic diseases. Prof. C. attributes cholera to a special epidemic cause, without committing himself to any of the fanciful theories which have been advanced on this subject. But he attributes, also, no small importance to various collateral, or concurring causes, which he classifies under the name of *sporadic causes*, the coöperation of some of them being more or less involved in almost all cases. These causes are far more appreciable than the specific cause, and, moreover, may be, to a considerable extent, controlled; hence the vast importance of hygienic regulations, in arresting, or limiting the prevalence of this terrible malady.

Prof. C. is not an advocate of the doctrine of contagion. He is disposed to doubt the existence even of what has been called "Contingent Contagion." He would account for the occasional diffusion of the affection among inmates of hospitals, by the operation of the various circumstances appertaining to such institutions which are likely to act as cooperating, or

exciting causes. He states that "all past experience goes to prove, that hospitals properly ventilated and cleansed, are no more liable to produce the disease than other places."

The subject of contagion has engrossed a considerable share of the literature of cholera, as indeed, of all epidemic affections. It had seemed, however, as the author remarks, to have been settled pretty conclusively in so far as the general unanimity of the Profession is concerned, albeit the doctrine has had several powerful advocates, among whom are Drs. Copeland and Watson of England. Facts connected with the recent prevalence of the disease at New York, New Orleans and other southern places, have appeared to favor the supposition of its contagiousness, and the number of those now disposed to favor its diffusion in this way is greater than formerly.

We are not prepared to deny *in toto* its personal communicability, but we think it can be established by a variety of considerations, rendering the position as strong as it could well be without demonstration, that the principle of contagion if it exists, is limited in its operation, and will by no means account for the diffusion of the disease. If it be communicable in any sense like the eruptive fevers, or even typhus, it certainly offers a striking contrast with all the laws respecting the operation of contagion in these affections.

The author next treats of the *symptoms* of cholera. He divides the disease into *four* stages. The *first* stage embraces what have been frequently called the premonitory symptoms. Prof. C. regards it as highly important to consider this as a veritable stage of the disease. He considers it to be entitled to be distinguished as the "curable stage," and thinks that at this period the disease may be arrested with almost certainty by judicious means. The *second* stage is marked by the rice water evacuations, cramps, coldness, feeble pulse, extreme thirst, &c. peculiar burning sensation at the pit of the stomach. The *third* stage is characterised by that array of symptoms constituting the *state* of collapse, with which the reader is sufficiently familiar. The *fourth* stage, which the author thinks embraces *sequences* of the disease, rather than what are properly its *symptoms*, consists of the phenomena supervening when reaction occurs after the state of collapse, phenomena denoting a condition almost perfectly analogous to typhoid fever. Patients often succumb in this condition, after having passed through the preceding stages.

The *Pathology* is the subject which follows next in order. After reviewing briefly some of the views entertained by different authorities, the author expresses the conclusions to which he has been led by his own observations and reflections, as follows: —

"Whatever be the nature of the poison, and whether its primary action be on the blood, or the nervous system, the effect is evidently to prevent those changes in the circulation by which heat is generated, and the vital current purified. Carbonic acid is not formed by the union of the carbon with oxygen; heat is not generated; the blood, still charged with carbon, paralyzes the action of the heart, which, in its turn, becomes enfeebled; congestion of the internal organs follows, as in actual asphyxia; the nervous system being also paralyzed, the congested organs are incapable of retaining their contents, and the watery portion of the blood escaping by transudation into the intestinal canal, is ejected by vomiting and purging; hence, the discharge; hence, the discoloration from retention of the carbon; hence, the extreme cold, in consequence of heat not being generated, and of the rapid evaporation from the surface; hence, also, the dark color, and thickened consistency of the circulating fluid, and, hence, too, the reason why injection of saline fluids into the veins seldom succeeds in restoring the patient, though it may revive him for a time, for it cannot remove the congestion of the capillary system.*

"Dr. E. A. Parkes, of London, in a recent work on the subject, has advanced, and endeavored to maintain the doctrine, that the poison of the atmosphere acts primarily on the blood. I am, however, disposed to believe that the condition of the blood, upon which he founds his principal evidence, is not the primary affection, but that the impression is primarily on the nervous system, prostrating its energies, and thus preventing those changes in the condition of the blood, and nutritive processes, by which the blood is purified, and caloric evolved. Dr. Parkes thinks that the changes induced in the function of respiration, are directly consequent upon the alteration of the blood, and are the proper and distinctive symptoms of the disease. We suppose, on the contrary, that the changes in the function of respiration are induced by deficiency in nervous energy, and that the altered state of the blood, follows as an effect, instead of being the cause."

We come now to that most important of all subjects connected with the disease, viz, its *treatment*. To the remarks under this head it would be impossible to do proper justice without quoting them entire. We shall briefly state some of the more important points, refering the reader, as also with respect to the topics embraced in the other divisions, to the work itself, for a fair exposition of the author's opinions. We have no specific remedies for cholera, consequently the appropriate therapeutical measures must be tried upon rational principles, and the results of experience, and the former will, of course, bear a close relationship to the views entertained respecting the pathology.

* Nearly all writers and observers agree that congestion of the internal organs, and of the venous system in particular, is one of the most constant and striking of the phenomena in cholera. We fear, however, that sufficient discrimination has not been used, as to the important pathological distinction between active and passive congestion; for the first, blood-letting is an almost certain remedy, whilst, for the second, its utility is frequently more than problematical. No doubt the congestion in cholera, is of the latter character, and unless we can secure some evidence of reaction, there would be no certainty of the congestion being relieved by bleeding.

Prof. C. submits the treatment adapted to each stage under a distinct head. The objects to be attained by remedies in the *first* stage are, to "remove nervous prostration, and the congestion which has already commenced, by equalising the circulation." For these objects, are recommended confinement to bed and warm mild aromatic drinks, with a view to procure perspiration; this should be promoted by Dover's powder, in combination with calomel in small quantities; or, by a combination of opium, camphor and calomel, as follows:— opium gr. $\frac{1}{4}$, camphor gr. ss., calomel gr. i, repeated every two hours. A small dose of rhubarb and magnesia or pure castor oil, should be given after five or six doses of the above have been administered.

An emetic of ipecacuanha, or sulph. zinc, may be administered, if there is a sense of nausea and oppression, or if the stomach is oppressed by a recent meal. Bleeding, carefully practiced, watching the effect, is called for if the patient be of a full, strong, or plethoric habit. Great care to prevent relapses should be observed for several days after the symptoms of this stage are relieved. The vast importance of resorting to judicious treatment in this stage is enforced, and the author, as already stated, expresses a confident belief, that, if appropriately treated in this stage, the disease may, with almost certainty, be arrested.

Owing to the fact that the symptoms of the *first* stage very often do not excite sufficient alarm, or attention, to lead the patient to apply personally for medical aid, a large proportion of the cases which come under treatment present the phenomena of the second stage fully developed. The treatment recommended by the author in this stage, is too succinctly expressed to admit of condensation, and we therefore give it in his own words:—

"If the patient was strong and plethoric, the pulse still full and distinct, the cramp severe, or there was great oppression in breathing, we would put the feet and legs in water as warm as could be borne, with the addition of mustard and common salt to the water; open a vein in the arm, and bleed from five, to sixteen or twenty ounces, watching the effect produced on the pulse and system generally; then place the patient in a warm bed, apply warmth to the feet and along the limbs; apply a large mustard cataplasm over the stomach, and give one of the pills of calomel, opium and camphor, every half hour. If the desire for cold drinks is not strong, the patient may drink from time to time a weak infusion of spear-mint, with the addition of eight or ten drops of camphorated spirits; if, however, the thirst is very intense, cold water may be used instead of the tea, and, in addition, small bits of ice given from time to time. The bed should be placed in the center of the room, without curtains, and the room should, if possible, be large, well ventilated, and if an upper room the better. If the weather will admit, the doors and windows should be kept open—the best stimulus for the patient is plenty of pure air—if the weather is damp, or

chilly, so as to render it necessary to close the windows and doors, a little fire should be placed in an open fire-place, to temper the air; no persons should be admitted into the room except such as are necessary; every additional person renders the air more impure. The warm applications should be changed from time to time. If the patient be much exhausted or vomiting, on no consideration should he be permitted to get up to use the night vessel—the effort of getting up revives the vomiting, and this in its turn brings on the alvine discharges. If the patient be feeble and delicate, or if the discharges have been profuse, or if the fluids of the system have been drained off by long continuance of diarrhœa in the first stage, the bleeding must be omitted, and the other means adopted as before. If there is great precordial oppression, cups may be applied over the region of the stomach, and the mustard over the abdomen and over the stomach after the removal of the cups. If the pulse becomes gradually more full and distinct, and warmth returns to the surface, we have only to persevere in these means; after a time giving the pills less frequently, and permitting the patient to take some light nourishment as chicken tea or light broth. If the perspiration becomes profuse—as will be likely—with a warm skin, it should be encouraged by taking some tepid aromatic drinks; the spearmint tea with a few drops of camphor is as good as any thing. If, notwithstanding these means, the patient continues to sink, or the profuseness of the discharges continue, we must resort to other means to try and arouse the system to reaction. Much care is, however, necessary to avoid throwing the patient into the fourth stage. Sulphuric ether in small doses should be given, and repeated every ten or fifteen minutes; or a weak solution of carb. of ammonia may be substituted. At the same time an enema of a pint of chicken tea, with a table-spoonful of table salt, should from time to time be thrown into the bowels, and its retention secured for a few minutes by pressure on the fundament; a sheet must be placed under the patient to receive the discharges, and on no account should be permitted to rise from the bed. If symptoms of reaction come on, the use of the stimulants should be gradually suspended. We believe that the more permanent and powerful stimulants, such as brandy, ardent spirits, &c. are only admissible where the patient has been addicted to their use. Too much precaution cannot be used during the period of convalescence as regards diet, exposure, &c. in all cases in which the disease has approached the stage of collapse.”

The treatment of the *third* stage does not differ in its essential principles from that of the *second*. The grand object is the same, viz. “to arouse the dormant energies of the system by external warmth, pure air, and gentle and moderate stimulation.” The author enjoins to continue persevering efforts under the most unpromising appearances, in as much as, although the prospect of recovery may really be small, there are no structural lesions which render recovery impossible, even when the symptoms are of the severest character.

The following quotation contains the plan to be pursued in the *fourth* stage:—

“If reaction be imperfectly established, the treatment must be governed

by the variable condition of the patient. If the condition of the patient will admit, blood in moderate quantities may be drawn from the arm, but most frequently we shall be compelled to content ourselves with its abstraction by cupping and leeches, followed by fomentations and counter irritation. If the extremities are cold, warm and stimulating applications should be made to them. Cold may be applied to the head when painful; if the stomach is irritable, ice may be given, and the pills heretofore recommended, with the addition of one-fourth of a grain of ipecac to each pill. Mild nourishment should be given, and the pills continued until some impression is manifest on the general system. If typhoid symptoms supervene, it may be necessary to resort to tonics and stimulants, as sul. quinine, serpentaria, carb. of ammonia, wine whey, oil of turpentine, &c."

An appendix to this work contains the "Treatment of Epidemic Cholera by C. Searle, M. D. from the London Times;" "Report of a Committee of the Royal College of Physicians, London;" and "Report on Sanitary Measures, by the Board of Consulting Physicians of the City of Boston;" all interesting and valuable documents.

In concluding this brief and imperfect analytical sketch, we would again express the satisfaction which a perusal of this work has afforded us, and the hope that it will meet with an extensive circulation. It is a work to be commended in anticipation of the prevalence of the dreaded epidemic in different parts of our country, in as much as it is brief, and eminently practical. Nothing irrelevant and but little that is theoretical, have been admitted, to make a ponderous volume, discouraging to a practitioner, and impairing, by dilution, that which is useful. The aim of the author, as the work throughout bears internal evidence, has been to prepare a treatise which, at this juncture, shall be acceptable, and really valuable to the practitioner; ends which we doubt not, the readers of the work will regard as fulfilled.

We would also again advert to the fact that this is a Buffalo book, being one of several works that have lately been published by the enterprising book-sellers—G. H. Derby & Co. We trust the time may soon arrive when the publication of a valuable work in our flourishing city, will not admit of any comment on the score of the novelty of the event.

ART. VII.—*Medical Cases at the Buffalo Hospital of the Sisters of Charity.* By AUSTIN FLINT, M. D., Attending Physician.

We purpose, under this head, to continue, in successive numbers of this Journal, reports of cases occurring at the *Buffalo Hospital of the Sisters of Charity*, selecting those which shall appear to possess special interest or importance. We select for this number, a single case.

Case of circumscribed arachnitis, situated at the base of cerebellum, attended by effusion, terminating fatally, complicated with miliary tuberculosis of the lungs.

Margaret O'Mier, aged 11 years, entered the Hospital, Jan. 22d., 1848.
History and Present Symptoms.—Has suffered from cough, for the last two or three months. During a portion of this time, the cough was quite troublesome, being almost constant. Now, coughs but little. Has expectorated freely, but now the expectoration is slight. States that her previous health was good. Presents on neck, a cicatrix, but without the characteristic marks of a scrofulous cicatrix. She appears quite intelligent. States that she suffers from a sense of chilliness, much of the time, but has not had distinct chills, or rigors. Has had considerable pain at inferior part of sternum, of a dull character. Has also had stitch-like pains. Says she does not feel weak. Appetite is good. Bowels regular. Tongue lightly furred. Skin cool. Pulse 104. Says she has lost considerable weight. On physical examination of chest, the results were negative.

The following was prescribed:—S. ferri grs. ss, S. Quinine gr. 1, Sulph. acid aromat, gtt. viii three times daily.

March 7th.—Since former date, the patient has experienced, several times, lancinating pains in chest, continuing for two or three days, which have apparently been relieved by sinapisms. With this exception, she was able to be about, and to do light housework.

On physical examination on this date, a difference in *pitch of resonance*, was observed between the two sides in infra clavicular regions, and a *slight sibilant rale* in right infra clavicular region. Otherwise, no morbid signs discovered. The cough and expectoration, since her entrance, had been slight, almost insignificant. From the signs just noted, however, taken in connection with the stitch-like pains, and history, the case was regarded as one of incipient tuberculosis, and on this date, was so enrolled in the book of Hospital records.

March 12th.—The patient was in bed this morning, complaining of pain in head, and in left chest, also of weakness. These symptoms, on this day, were not regarded as calling for special treatment.

14th.—Continues to complain of headache, and remains in bed. Sinapisms to nuchæ.

15th.—Headache continues. Blister to nuchæ. Up to this time, there had been no febrile movement, and nothing to awaken suspicion as to any immediate danger.

16th.—A striking change in the character of the case. Pain in head continues. *Respirations sixty-two in a minute, and irregular. Pulse eighty, and irregular.* Physical examination revealed no new pulmonary affection, nor any cardiac affection. Skin was cool. Intelligence perfect.

Says she slept well. Manifests no unusual susceptibility to light or sounds. Muscular strength good. Bowels moved yesterday afternoon. Passes urine freely. She is disposed to sleep. Says she has slight nausea. No appetite. Tongue coated. Blister to nuchæ repeated, which had not properly vesicated, and calomel, grs. ii, prescribed, to be repeated at intervals, which, by a defect in the records, is not stated.

At evening, respirations very irregular, short, and catching. Pulse 72, very irregular and feeble. *Does not experience any suffering from embarrassment of respiration.* Has perspired freely this afternoon. Has less pain in head. Has slept considerably. Intelligence perfect.

Cont. med., and give, in addition, carb. ammonia, grs. ij., every two hours. Employ strongly sinapised foot bath, every four hours, and, for diet, a little essence of beef.

From the above assemblage of symptoms, it was evident that some serious cerebral trouble existed. That the affection was not one of extensive, or acute inflammation, was obvious from the absence of febrile movement, and other symptoms. That the cerebral hemispheres were not involved, was apparent from the fact that the intellect was perfect, the senses unaffected, etc. In short, the grave symptoms being limited to the respiration, and action of the heart, it was concluded that the affection involved particularly, and exclusively, the medulla oblongata. This opinion was stated in the clinical remarks on the case to the medical class then in attendance, being predicated upon the facts just referred to. The pains, it should be mentioned, were referred by the patient, to the occiput chiefly, With reference to the character of the cerebral affection, there did not appear to be any facts warranting a definite opinion. The particular portion of the encephalic structures involved, or immediately inflicted, was sufficiently clear, but the nature of the morbid condition was uncertain. Tubercular meningitis was suspected, from the fact that tuberculosis of the lungs was believed to exist, together with the evidences in the case of a scrofulous habit.

17th.—Reports better. Has still some pain in head, but less than yesterday. Respirations twenty, inspiration quick. Pulse eighty, skin warm. Continued treatment.

18th.—Continues better. No pain. Pulse sixty-eight, more regular. Respirations twenty, regular and natural. She is inclined to sleep, and fell asleep during the visit, but is easily roused. Bowels moved once yesterday. Skin warm. Tongue coated and moist. Has some appetite, and relishes the essence of beef.

Omit mercurial. Give iodide of potash, gr. iii, every four hours. Give the ammonia if respiration becomes irregular. Continue pediluvia.

19th.—Complains of some pain in the head this morning, greater in one part but not limited to that region. Speaks with embarrassment. Some apparent difficulty in expressing her ideas in words. Skin cool. Pulse 68. Respirations 28, sputa somewhat colored. Tongue coated and moist. Slight frowning, noticed for the first time. Bowels moved yesterday. Iodid. Potas. gr. x, every 4 hours. Let the hair be cut short, and apply blisters behind ears. *Evening*.—Slight frowning. Respiration improved. Pulse same. Pain in head continues, but is less than in morning. Has taken food with relish.

20th.—Reports better. No pain in head. Tongue cleaning. Says she was unable to sleep during the night, but was not kept awake by pain, or any distress. Respiration tranquil. Skin warm. Pulse normal. Appetite good. No dejection yesterday. On examination of spine, considerable tenderness was found to exist over the cervical and dorsal vertebrae. Accelerated and labored respiration was produced by pressure over these portions of the column.

In view of the latter symptoms it was hoped, and considered possible, that the affection might be functional, representing one of the protean forms called *spinal irritation*.

21st.—Suffered much during the night from severe pains over the whole body, as she states, coming on in paroxysms. Was unable to sleep. Feels better this morning. Has desire for food, but less than yesterday. No dejection yesterday. Respiration tranquil at first, but during the examination it became accelerated and labored. Pulse 100. Morphine had been given in night to relieve pain, and sinapisms applied to spine. Tongue coated and moist. Skin warm. Pressure over spine produces acute pain, and accelerated breathing. *She states that she sees objects double*. Apply blister over dorsal spine. Ol. Ricini 3iij. Morphine to relieve paroxysm of pain, gr. $\frac{1}{8}$, *pro renata*.

Evening.—Respiration accelerated, and expiration accompanied by a groan. Double vision continues. Paroxysms of pain continue.

22d.—*Evening*.—Suffered extremely from general pains during night, most severe in back. Respiration variable. Has slept much of the day, and tranquilly. Has bled from the nose during the night and day several times. Upper lip swelled. Tongue moist, with thick brown coating, except at tip, which is furred. Pulse 132. Skin warm and dry. No dejection for several days. Enema of infusion of Senna, to be repeated if free evacuation does not follow.

23d.—Sleeping tranquilly at the time of visit. Respiration natural. On being awakened, states that she is no better. Feels pain in head and back, and very weak. States that she had no better night than before, but she seemed to others to be more comfortable. Bowels moved freely last evening. Says she is hungry. Ate this morning bread and tea with relish. No nausea. Pulse 140. Double vision continues. There is slight strabismus. Paroxysms of pain continue to recur. Pulv. Doveri grs. ii, calomel grs. i, every four hours. Hoffman's anodyne, 3i, *pro re-nata*.

Evening.—Has suffered much through day from pain in the back, head and extremities. Pulse 128. Respiration irregular. Double vision continues. Continue med., adding spts. terebinth., 3ss, in emulsion, every four hours, and increasing anodyne if pain is severe.

24th.—Died at 11, P. M.

Autopsy, 12 hours after death. Body presented moderate emaciation.

Head.—Moderate congestion, otherwise no morbid appearances of brain, except at inferior surface of cerebellum, over a space of about the size of half a dollar. Over this space, the arachnoid was opaque, somewhat thickened by lymph, and easily detected. Considerable effusion at base of skull, and fluid escaped freely from spinal canal. The effused fluid was sanguinolent, probably from being mixed with blood from vessels divided in removing the brain. Quantity of fluid estimated to be between 3 and 4 ounces. Lateral ventricles contained, each, about half an ounce of serum, slightly turbid.

The spinal marrow was examined as low as the fifth dorsal vertebra, and nothing morbid discovered.

Chest.—Tender adhesions of pleural surfaces, generally on both sides, over some portions quite recent. The upper portion of lungs, on each side, studded throughout with miliary tubercles. No tuberculous deposits larger than millet seeds, and no cavities. *Heart.*—Nothing abnormal.

Abdomen.—Nothing abnormal observed, except moderate enlargement of mesenteric glands. Stomach and intestines not opened. No lumbricoid entosoa in intestines, but two were partially protruded from anus. Intestines empty, and collapsed.

Remarks.—We may regard the sub-acute arachnitis, existing over a small, circumscribed space, situated just posteriorly to the medulla oblongata, as the pathological condition to which the result, and antecedent phenomena of this case are to be ascribed. The inflammation was so limited in extent, and of so little acuteness, that the early symptoms gave no intimations of the character of the disease, or the danger of the patient.

The development of the symptoms noted on the 16th of March, five days after headache was first experienced, marked the occurrence of effusion, sufficient to disturb, by compression, the functions of the medulla. The combination of symptoms then exhibited, indicated, in the first place, serious encephalic trouble. These symptoms were, irregular and greatly accelerated respirations, in connection with diminished frequency of the pulse; coolness of the surface; continued pain in head, none marked in occiput; and the absence of any evidences of a new pulmonary affection. It is to be observed, that notwithstanding the respirations were so frequent that the patient appeared to be panting for breath, no sense of embarrassment, or dyspnoea, was experienced. This denoted that the cerebral cause was so situated, as to impair the instinctive sense connected with the respiratory function. The fact that the phenomena of a grave cerebral affection, were almost exclusively manifested in the respiration, together with the absence of symptoms appertaining to inflammation, or other disease affecting the cerebrum, was sufficient to warrant the conclusion, that the disease was situated so as to involve the medulla oblongata, the direct relation of the latter to the respiratory function, being considered. Hence the diagnosis, in so far as the situation of the affection was concerned, the correctness of which, was verified by the autopsy. The same amount of arachnitis, elsewhere situated, for example, on one of the lateral surfaces of the cerebral hemispheres, would not have led to such a combination of symptoms—characterized by so disproportionate disturbance of the respiration; and situated, as it was, it was probably not sufficient to involve imminent danger, except from the effusion which occurred. Our attention has been directed, by several cases that have come under observation, to the occurrence of effusion at the base of the brain, and we are satisfied that it is a not unfrequent cause of death, occurring unexpectedly, and more or less suddenly, especially in children. Every observing practitioner is aware that disproportionate disturbance of the respiration, irrespective of pulmonary disease, is generally of bad omen, in whatever pathological connections it may be found. It is so, for the same reason that it was significant in this case, denoting encephalic trouble, involving the medulla oblongata, leading, in fatal cases, to asphyxia, by destroying the physiological sense presiding over the involuntary movements, necessary to the respiratory function.

The case is also one of interest with reference to the tuberculosis of the lungs. The fact of such extensive pleuritic adhesions so early in the progress of the tuberculosis disease is deserving of note, and serves to confirm

the diagnostic value of the stitch-like pains, which are to be enumerated among the evidences of incipient Phthisis. The existence of miliary tubercles, without sufficient consolidation to produce decided dullness on percussion, and other marked signs, but nevertheless consisting with signs, slight in degree, but significant in character, upon which the diagnosis of tuberculous disease was based, may serve to illustrate the possibility of discriminating this affection even at so early a period. In this point of view the case was highly valuable, inasmuch as it is extremely rare that an opportunity is afforded of determining by autopsical examination the exact condition of the lungs in connection with the physical evidences of incipient tuberculosis.

April 20th, 1849.

ECLECTIC DEPARTMENT,
AND SPIRIT OF THE MEDICAL PERIODICAL PRESS.

ROKITANSKY on *Cyanosis*; translated by MORETON STILLE, M. D., of Philadelphia.

In an essay upon Cyanosis, published in the American Journal of the Medical Sciences, for July, 1844, we gave a list of the principal anatomical conditions of the heart and great vessels, found in this disease, and endeavored to explain the share which each had in its development. The views of its pathology, which we were enabled to deduce from an analysis of a large number of cases, was based upon the constant occurrence of such conditions as offered an impediment to the free return of blood to the heart; and we then stated, that a more extended observation would most probably indefinitely augment the list of causes having the same pathological tendency. Since the publication of this essay, we have met with numerous cases which illustrate the correctness of the doctrine there advocated, viz.: that in cyanosis, the essential proximate cause, not only of the discoloration of the skin, but of all its important phenomena, is simply and exclusively venous congestion. These views have since been fully corroborated by several other writers, and among these we are glad to rank Prof. Rokitan-sky. To those who know him, or who have read his great work upon pathological anatomy, it would be needless to say any thing in commendation of the following pages. We would only beg leave to preface, for the information of others, that the author of the '*Handbuch der Pathol. Anatomie*,' from which the following chapter upon cyanosis is taken, is the Prof. of Morbid Anatomy in the University of Vienna; his fame as a teacher, and as a devoted, exact and enlightened observer, has raised him to the highest eminence in this department of medical science. His work has not yet been translated into the English language, but we think that the article which we have extracted, containing, as it does, a more complete view of the morbid conditions found in cyanosis, than can be obtained from any other work, will be read with interest by all who are familiar with those different doctrines of the pathology of this disease, which are so zealously maintained by their respective advocates.

*Cyanosis.**—Cyanosis has been for so long a time, an object of anatomical investigation, that we cannot forbear expressing the views we hold concerning it and its relation to diseases of the heart. The views that we entertain upon this subject, have not, indeed, been formed upon a review and analysis of all the known cases of cardiac cyanosis, but are the result of our own experience, and the examination of a limited material, derived from other sources. The same doctrines have been inculcated also by others, (Morgagni, Ferrus, Louis, &c.)

A distinction is generally drawn between an organic disease of the heart, occasioned by diseases of the lungs, and acquired in the later periods of life, and that form of cyanosis dependent upon congenital malformations of this organ. The latter bears the name of cardiac cyanosis; it will become manifest that the essential cause and character of both, is the same. Cyanosis, occurring in cases of congenital malformation of the heart, has been generally attributed to the mixture of the two kinds of blood, or rather, to the flow of the venous blood into the arterial, either in the ventricles, the auricles, or in the vessels themselves; and most persons have been disposed to refer this communication, and the cyanosis accompanying it, to the existence of a deficiency in the *septa* of the cavities of the heart.

We are of the opinion that cyanosis *always* depends, not upon the mixture of the two kinds of blood, (an occurrence in many cases quite problematical, and in others, taking place in a manner directly opposite to what is supposed,) but upon the impeded reflux of the venous blood into the heart, and a consequent habitual or intermittent engorgement of the venous and capillary system; that in this respect, all the varieties of cyanosis, however different in the original or acquired abnormal conditions of the heart and lungs, coincide, and may be, without violence, classed together.

The various malformations of the heart, which involve a deficiency in the integrity of its *septa*, do *not*, according to our experience, and to many observations analysed for the purpose, produce cyanosis, unless there exist at the same time, a narrowing or insufficiency in the calibre of the arterial trunks, or a contraction of the orifices of the heart. The patency of the foramen ovale, is a very common occurrence, which, during life, gives no sign of its existence, provided there co-exist no anomaly in the arterial trunks. This fact is the less surprising, when we know that under the same conditions, even in the total absence of the septum of the auricles, no cyanosis is manifested. The patency, in such instances, is without any known cause, and must so far be considered as purely accidental; in the other cases, which are comparatively rare, it is brought about by abnormal conditions of the great vessels, patency of the ductus arteriosus, deficiencies in the ventricular septum, endo-cardial valvular changes in the foetus, causing contraction of the *ostia*, by diseases of the lung, by catarrh, atelectasia, &c.

With regard to the supposed mingling of the two kinds of blood, in patency of the foramen ovale, it is to be observed that, most probably, no such mixture takes place, so long as the equilibrium between the contents of the two auricles is maintained, and the valve is pressed against the septum by the blood in the left auricle. Even in the cases of considerable deficiency of the valve of the foramen ovale, without, or even *with*, persistence of the eustachian valve, which guides the blood from the vena cava

* Handb. der. Pathol. Anat. ii, Bd. 2 Abtheilung, S. 510.

towards the foramen, no cyanotic phenomena are produced, notwithstanding that in both these cases there must necessarily be a passage of the venous over to the arterial blood. In those cases, on the contrary, in which the patency of the foramen ovale is co-existent with, or depends upon the abnormal conditions before mentioned, cyanosis results, although the mixture of the two kinds of blood does not, by any means, always take place in the manner usually assumed. This is regulated by the nature of the co-existing malformation of the heart or great vessels. Where the channel of the pulmonary artery has been narrowed, or obliterated, the blood of the right auricle will, in consequence of the difficulty experienced by the right ventricle in emptying itself, be forced into the left ventricle; when, on the contrary, the aorta is similarly affected, the arterial blood will mingle itself with the venous. The same results will ensue in those cases of changes in the *ostia*, caused by endo-carditis in the fetal state, according as these processes have had their seat in the right or in the left side of the heart.

The patency of the ductus arteriosus involves that of the foramen ovale, but not in the manner usually assumed. It is supposed that the amount of blood in the left auricle is diminished in proportion to the quantity which the size of the duct may allow to be carried off to the aorta, and that by the consequent passage of the blood from the right auricle into the left, the closure of the foramen ovale is prevented. Instances are, however, met with, in which the form of the ductus arteriosus and its two extremities, and particularly the expansion of the one terminating in the aorta, render it highly probable that the blood goes from the aorta into the pulmonary artery. In these cases, the passage of the blood from the right into the left auricle, and the patency of the foramen ovale, result from the engorgement of the right auricle and ventricle, since the free escape of the contents of the latter, is hindered by the current of arterial blood entering the pulmonary artery from the aorta. In either case, whether venous blood mingles with arterial, in excess, or the reverse, cyanosis will be produced in consequence of the difficulty experienced by the *venæ cavae* in emptying their contents into a heart affected with dilatation.

A defective state, or complete absence of the septum of the auricles, although necessarily involving a mixture of the two kinds of blood, does not give rise to cyanosis, while the condition of the arterial trunk remains normal. A considerable number of observations has taught us, that these imperfections of the auricular septum, seldom exist without an anomaly in the arterial trunks, which, beyond all doubt, is often overlooked. This anomaly consists in an evident narrowing of the aorta, which although manifestly occasioning a mixture of the *arterial* with the venous blood, still gives rise to a well-marked cyanosis. The narrowing of the trunk of the aorta causes, equally with the same condition of its orifice in the left ventricle, an active dilatation of this cavity and of the left auricle, and as a further consequence of the right side of the heart also, through the medium of the capillary system of the lungs. The escape of arterial blood through the aorta being thus hindered, the first effect produced, is that a part of it is forced into the right auricle, and mingles with the venous blood; the second, that the venous blood, from the general circulation, cannot freely enter into the engorged cavities of the right side of the heart, and cyanosis finally results. It is obvious, that in these cases an active dilatation of the

right ventricle, and especially of the conus arteriosus and pulmonary artery, is generally produced. Bouillaud cannot suggest for this fact, any better explanation, than that the right ventricle is stimulated by the contact of the arterial blood introduced into it from the left auricle. Even a *deficiency in the ventricular septum*, and the consequent establishment of a communication between the two ventricles, does not, as many observations have proved, produce cyanosis, without some co-existing anomaly of the arterial trunks. The less the deviation of these from their normal condition, the more trifling and transient will the cyanotic phenomena be, and will only occur under certain circumstances, such as mental emotions, bodily exertion, and diseases of the lung. But, with this deficiency in the ventricular septum, there are commonly associated such important anomalies in the great vessels, that a well-marked cyanosis almost always accompanies it. The most common of these, are the narrowing, or total occlusion of the aorta, or the pulmonary artery—most frequently the latter—so that the aorta taking its rise from both ventricles, supplies blood to the system at large, and to the lungs also, by means of abnormal branches. Now, this vessel being insufficient to carry off the blood of both ventricles, cyanosis must result from the impeded entrance of the venous blood into them, and the more certainly, as in cases of deficiency of the ventricular septum, when the great vessels are in a normal condition, or even when they are transposed; it does not occur at all, or only at particular times, as *e. g.*, from diseases of the lungs; yet here the complete and constant admixture of the two kinds of blood, is not open to any doubt. The same effects are produced in cases of contraction of the cavity of a ventricle; it becomes—together with the arterial trunk arising from it—insufficient for the whole mass of the blood; in other words, it is ultimately brought about by an accumulation of blood in the venous system, owing to the obstacle which the right ventricle suffers in the discharge of its blood into the lungs.

The heart is in all these cases dilated and hypertrophied, sometimes in both ventricles, sometimes one is more affected than the other, and this is commonly the right ventricle, so that the heart retains the same proportions between its cavities as in fetal life. Cyanosis, though constant in some cases, is generally remittent in its character, or is only manifested after certain exciting causes, among which may be classed all those which obstruct the free circulation of the blood through the lungs and the heart, as mental emotions, violent exertions, &c., but above all, diseases of the lungs. Of these latter, pulmonary catarrh occasions most frequently the outbreak of cyanotic phenomena in children or in adults; this the more readily occurs, as in the above mentioned malformations, an habitual bronchial catarrh generally exists, in consequence of the continued engorgement of the pulmonary vessels. Cyanosis sometimes does not make its appearance until some time after birth, sometimes not until the age of puberty, and then results doubtless from the fact of the disproportion in the size of the arterial trunks to the heart, and the general mass of the blood becoming at this period of life, more important. But, according as cyanosis is permanent or interrupted, the result of known or of unknown causes, we may observe in the individuals affected with it, an arrest of development, deficient nutrition and calorification, general weakness and premature death; and in others again, a very slight impairment of the vital functions. In a few cases in which the heart offered all the conditions favoring a com-

plete mixture of the blood, a most satisfactory state of all the functions has been found, a fact which some persons have endeavored to explain, by supposing that an equal development of both sides of the heart may have prevented the mixture of the two kinds of blood. A morbid condition, frequently found with cyanosis, is the fusiform enlargement of the ends of the fingers, with a corresponding convexity of the nails. This is entirely unexplained, and if a similar condition, as is maintained by many observers, is to be found in pulmonary phthisis, it may, as a phenomenon existing in connexion with cyanosis of the lungs, be adduced as additional proof of the correctness of our views of the origin of cardiac cyanosis. An observation of importance which militates against the general doctrine of the pathogeny of cyanosis, was made by Breschet, who saw a case in which the subclavian artery of the left side, arose from the pulmonary artery, without any discoloration ensuing in the corresponding extremity. But still local cyanosis may be witnessed in those cases in which the return of the venous blood is obstructed, as *e. g.*, by the passage of arterial blood into a vein in varicose aneurism. Finally, (as observed by Fouquier,) the fœtus is not cyanosed, notwithstanding a constant mingling of the arterial and venous blood takes place in it.

A phenomenon in every respect, of great importance in cardiac cyanosis, may be found, in the hæorrhages from the capillary system of various organs, particularly from the lungs. They are without doubt produced by a rupture of the engorged capillary vessels, and fully corroborate our views of the cause of the disease. In a case which came under our observation, in a boy of eight years of age, having cyanosis, and in whom there was found a perforation in the ventricular septum, occlusion of the pulmonary artery, and the aorta springing from both ventricles, death ensued from a rupture of the aorta. Cyanosis dependent upon malformation of the heart, comes to a fatal termination, either suddenly or slowly, just as in acquired diseases of the heart. Finally, cyanosis is an ordinary symptom of many diseases of the heart. Among these may be reckoned dilatation and hypertrophy, when excessive, together with those diseases of the valves which give rise to them. Certain morbid non-congenital conditions of the arterial trunks, as narrowing, obliteration, communication of the aorta with the pulmonary artery, or with the venæ cavæ, and the consequent passage of the aortic blood into these vessels, will all produce cyanosis. Although these diseases may have been acquired at a very early age, or been congenital, yet frequently the cyanosis does not make its appearance until a later period. The question whether cardiac cyanosis can be acquired by a re-opening of the foramen ovale, and a perforation of the septum, by an inflammatory and suppurative process, or by a rupture, is still problematical. The assumption of the possibility of the re-opening of the foramen ovale, comes to us from a time when too much stress was laid upon the importance of its patency, and has hence been employed to give a finish to a favorite theory. The instances which are related of the perforation of the septa by disease, are partly, of course, not improbable, but they all lack a sufficiency of detail, and are incomplete in their proofs of a pre-existing inflammatory or suppurative process. This is particularly the case with those which might throw some light upon the question, whether these processes had not already commenced in the fœtus, and hence the perforation be considered as congenital, or whether, indeed, the evidences dis-

covered of a pre-existing inflammation might not rather have been subsequent to the perforation instead of associated with it. This suggestion is deserving of attention, inasmuch as in cases where these malformations are found, there may be discovered, not unfrequently, traces of old or recent endo-carditis.

While the cause of cyanosis may be generally referred to the heart, and especially to its right side, it may also be derived from the most various congenital or acquired diseases of the lungs, which involve an impeded circulation through the pulmonary capillary system. When this is the case, and the blood cannot penetrate fully into the lungs, it is thrown back upon the right side of the heart, and thus causes cyanosis; moreover, as has been already observed, the right side of the heart becomes in consequence of this continued engorgement, actively dilated, in a degree corresponding to the amount of resistance offered by the lungs. It is chiefly, however, diseases of the left side of the heart, such as dilatation and hypertrophy of the ventricles, and, particularly, contraction of the left *ostium venosum*, which, in consequence of the impediment to the return of the blood from the lungs, occasion an engorgement of the right side of the heart and of the venous system, and in the end, cyanotic phenomena, with an extension of the hypertrophy and dilatation to the right side of the heart. Further, those conditions of extreme thickness of the lung, continued compression of it, (by exudations) atelectasis, catarrh and bronchial dilatation, emphysema, pneumonia and extensive pneumonic induration, pulmonary tubercles, &c., produce cyanosis on the same principle as the narrowing or occlusion of the pulmonary artery. They may, moreover, if congenital, or acquired soon after birth, prevent the closure of the passages peculiar to the fetal circulation. All forms of cyanosis, or rather all the diseases of the heart, great vessels and lungs, adapted to produce cyanosis in a greater or less degree, cannot co-exist with *tuberculosis*. Cyanosis affords a complete protection against it, and in this circumstance may be found an explanation of the immunity from *tuberculosis*, which many conditions of the system, apparently very different in their character, afford.—*Medical Examiner and Record of Medical Science.*

Remarks on the Antagonism between Tubercular Phthisis and Marsh-fever.

By Dr. HELLFT, of Berlin. Translated from the German,* by DANIEL STAHL, M. D., of Quincy, Illinois.†

Many physicians, and among them, Boudin, especially, conclude from a vast number of facts, that phthisis has an antagonistic relation to marsh-fevers. The truth of this conclusion can only be tested by a statistical

* Schmielt's Jahrbücher der in-und ausländischen gesammten Medicin, 1848.—*Heft*, 4.

† Although the subject here treated of, is not new to the profession, yet as it is far from being well understood, and as it is of such vital importance, particularly to us in the United States, I thought that a leisure would not be illy spent in giving to the American medical public an abstract of the views of a German, who is well worthy of being heard. Whoever wishes more extensive information on the subject of the antagonism of diseases, particularly of phthisis and typhoid fever, with marsh fevers, etc., etc., would do well to consult "Etudes de Geologie Médicale sur la phthisie pulmonaire et la fièvre typhoid, dans leur Rapports avec les Localités Marécageuses, &c., &c. Par S. Ch. Boudin, Paris, 1845.—*Translator.*

examination and comparison of extensive observations, a method which, although attended with many difficulties, leads most safely to a decided result.

The author adds to the well known observations of Boudin and of several German physicians, those of a more recent date, and as the contradictory accounts might give rise to doubts touching the curative power of marsh miasm in phthisis, he shows the reasons why these observations differ from each other.

Levacher, for example, proves that in the marshy districts of the West Indies, where malaria generates intermittent and remittent fevers, phthisis is of frequent occurrence. Phthisis, according to Chisholm, is not a rare disease in those islands. Tschudi maintains, that intermittent fever and phthisis occur in equal proportion in Peru. In Brazil, where intermittents are the prevailing diseases, phthisis, according to Sigaud, kills one-fifth of the entire population, and of the colored portion, even the sixth or seventh part.

It is surprising, that despite of these facts, French physicians still recommend Algeria as a salutary residence for consumptive patients. Broussais invited the attention of phthisical sufferers to Algeria, and maintained that phthisis is not as frequent there as in France, ascribing this to the climate. He never found in the cadaveric examinations of those dead of other diseases, tubercles in the lungs; he does not deny, however, that cases of phthisis do occur there, although rarely, and that they develop themselves there, even during a prolonged residence near marshy localities, and after several attacks of fever. Bounafont, furthermore, makes mention of the fact, that during the winter and spring, pulmonary diseases prevail in Algiers, on account of the great changes of temperature; but he says in relation to the curability of pulmonary affections, that their cure, as far as they are curable, is very much aided by the temperature, which never sinks there as low as in northern countries.

The results, as to the influence of miasmatic effluvia on phthisical patients, are hence not the same every where. From all the accumulated observations, the author infers, that 1st, marsh miasmata, do not, in themselves, and alone, possess the curative or salutary power, but that with them, the degree of temperature, the equable temperature, the hygrometrical condition of the atmosphere, and lastly, the condition of the prevailing winds, must be taken into consideration. He therefore compares Gibraltar with Algeria. Notwithstanding the situation of both in the same degree of latitude, and the frequent occurrence in both places, of intermittent fevers, phthisis is more frequent in Gibraltar than in Algeria, on account of the great changes of temperature and the prevailing raw east winds.

2. That such a uniform atmosphere, impregnated with miasmatic effluvia, which is not too damp, affords protection only in the incipency of the disease, or smothers the tubercular dyscrasia in its very bud.

A warm climate does not, as was formerly supposed, of itself, exercise any remedial influence on tubercular affections, but the uniformity of the temperature, the hygrometrical condition of the atmosphere and the prevailing winds do. As, for instance, on the Andes, where intermittent fevers prevail endemically, there often occur cases of phthisis, on account of the great changes of temperature, whereas, on the coast of British Guiana, phthisis is not known, because of the equableness of temperature.

An atmosphere which holds a medium between too great dryness and moisture, is most conducive to health. A residence at Hijeres, is, therefore, not as beneficial to the sufferer from phthisis, as was formerly supposed, because the air is too "sharp" and dry, from the frequency of northeasterly winds. Thus Casper found that at Berlin, at a time when the atmosphere possessed a certain degree of moisture, the least number of deaths from phthisis took place; the temperature, on the other hand, appeared to him to exercise but little influence. At Madeira, when no intermittent fevers are observed, phthisis is of rare occurrence, on account of the mild and even temperature of the atmosphere, with a proportionate moisture, as well at different seasons, as during the course of the day. For the same reason, Bullar found the climate of the Azores, where marsh-fevers are also rare, advantageous to the phthisical patient. Out of 465 who suffered from chronic diseases, he observed but two with phthisis. Confirmed phthisis is, however, not cured there, but rather hastened, as has been expressly remarked by Dr. Kämpfer in his notes on Madeira, and as has been shown by facts, by Heineken.

In order, however, to decide the question, the author thinks that not only the temperature and degree of moisture are of great importance, but also another remarkable antagonistical relation between phthisis and marsh-fever, in the different races of men, which also have different susceptibilities for endemic fevers. It has, for instance, been shown, that negroes have hardly any susceptibility for marsh-fevers, but often suffer from tubercles in the lungs. Tschudi says, that the Indians are most frequently affected with intermittents, next the whites, and last of all, the negroes and dark admixtures. The blacks on the Senegal, also, suffer chiefly from bronchitis and other pulmonary affections. A fifteenth part of all the natives die of such complaints, whilst of the whites, only 1.50 or even 1.100 die of the like. At Rio de Janeiro, according to Jobim, negroes rarely suffer from intermittents, whilst those born in Brazil, and the whites, are subject to them. According to Ruz, at Martinique, Europeans rarely, but most of mulattoes and negroes die of consumption. The accounts of the diseases, and the mortality in the English army from the year 1817 to 1836, show that of 1000 men, there died annually:

	Of Intermittents.		Of Pulmonary Affections.	
	Whites.	Blacks.	Whites.	Blacks.
In English Guiana,.....	59.2	8.5	6.4	17.9
At Trinidad,.....	61.6	3.2	11.5	16.4
At Tabago,.....	104.1	8.6	11.	12.
In Grenada,.....	26.3	4.8	6.6	9.5
At Barbadoes,.....	11.8	3.8	15.8	18.7
At St. Domingo,.....	19.3	7.7	8.3	16.7
At Jamaica,.....	101.9	8.2	7.3	10.5
In the Bahama Islands,.....	159.1	5.6	6.	9.7
At Sierra Leon,.....	410.2	2.4	6.	6.3
At the Mauritius,.....	1.7	0.0	4.	12.9
At Ceylon,.....	25.7	1.1	4.9	10.5

The immunity of negroes from marsh-fevers was also verified in the negro expedition of 1841. On three ships a malignant fever was developed, in spite of every precaution, so that of 145 individuals, 130 were taken sick, and 40 died. Of 158 blacks, there were only 11 slightly sick,

and none died, these eleven having lived a long time in England. Major Tulloch remarks on the diseases of the Cape of Good Hope, that fevers are more rare among the Hottentots than among the whites, whereas, the former are more liable than the latter to pulmonary affections. Similar accounts are given by the French physicians of Algeria. There die, according to Guyon, many more native Moors and Jews, of phthisis, than Europeans, the latter succumbing more frequently to fevers.

The almost congenital immunity of natives from tubercles, in countries where marsh-fevers prevail endemically, is, according to the author, founded in a change of the organism, particularly of the blood, which manifests by a degeneration of the race of men who inhabit such countries, or of persons who are there acclimated. This view he believes to be sustained by the observation of Dr. Hille, of Surinam. The latter found, indeed, that the blood never showed a crusta inflammation, even during the most violent phlogistic symptoms. More than half the blood is serum, in which the crassamentum, as it were, swims. The latter is commonly dark red, while the serum is lighter than that of the Europeans. It is particularly remarkable, that the buffy coat is plainly discernable in the first inflammatory affections of those Europeans only, who have resided but a short time at Surinam; afterwards it disappears, and the blood has then all those appearances which are observed in that of negroes.

Pathological chemistry and all the recent anatomico-pathological researches have shown, that a high degree of serosity of the blood, *i. e.*, a diminution of the fibrin, excludes the possibility of the generation of tubercles. The production of tubercles requires an excess of fibrin in the blood, and certainly a qualitative, but as yet, unknown change in that fluid. Andral and Gavarret have already shown, that there is, from the incipency of tubercular phthisis, a tendency to an increase of fibrin, and to a decrease in the number of blood corpuscles; that this change in the chemical composition of the blood is but slight, in the crude condition of the tubercles, but that it manifests itself plainly during the stage of softening. Becquesel and Rodier obtained the same results.

Engel expresses himself on this point, in the following words:—"In order to prevent a tubercle from any further change, to fence it off, as it were, from the organism, and to render it harmless to it, or to remove it out of it, it is necessary to put the organism in such a condition, as to render a repetition of the secretion of fibrin, and hence a re-production of tubercle impossible, or, as it is expressed, to efface the dyscrasia. During dropsical diseases and scurvy, or during such diseases as are akin to the latter, the production of tubercles cannot take place. Diseases with stagnation in the circulatory system, also protect against tubercles, such as liver and spleen affections, but then only when the above-mentioned condition, namely—increased serosity—takes place."

Now as all researches on the composition of the blood in intermittent fevers and their sequel, prove that the quantity of fibrin diminishes as these diseases prolong their course or recur, while the blood-corpuscles generally remain unchanged, it is probable that therein is to be found the cause why marsh-miasmata and the diseases dependent upon them, afford a kind of protection from the generation of tubercles.

Could, therefore, such individuals as have a predisposition to tubercles, be sent to countries where marsh-fevers are the prevailing maladies, at the

same time taking the temperature and condition of the weather into consideration, the tubercular diathesis might be nipped in the bud. The above detailed condition of the blood is, however, always injurious in the advanced stage, or when softening of the tubercles has already occurred, because the ulcerations, now become atonic, cannot heal, and confirmed phthisis can, therefore, with such a blood, only be hastened in its destructive course.

The great influence of marsh-miasmata upon the generation of tubercles, manifests itself furthermore, in the continued immunity from phthisis, of such individuals as have resided in districts where marsh-fevers were endemical, long after they have left those districts. Thus it is told by Brunach, that at Marseilles, of 300 soldiers who have come from the marshy districts of Algeria and Corsica, only 2 were in the years of 1841-2 affected with phthisis, whilst among the inhabitants of Marseilles, 1 out of 4 deaths is from phthisis.—*St. Louis Medical and Surgical Journal*.

On the diseases of Onondaga County. By D. T. JONES, M. D., of Baldwinsville, Onondaga County.

GENTLEMEN:

In obedience to a resolution of this Society, I would submit a few remarks on the most prevalent diseases of the county of Onondaga.

This county is situated in the central part of the state, its southern half is elevated and hilly, lying on the Onondaga group of limestone. The northern half of the county is very level, being north, and below, the out-cropping of the limestone group, and scarcely broken by an elevation of any amount.

In consequence of the distinctive feature, few swamps and morasses are found in the southern section of the county, the streams are rapid, with high banks, while in the north, they are sluggish and muddy, with low banks. The Seneca river, a large, deep and sluggish stream, enters the county from the west, and after a slow winding course unites with Oneida river, the outlet of Oneida lake, the two forming the Oswego river, and, at the same time, taking a more rapid course until it falls into Lake Ontario. These rivers have been noted since the first settlement of the county, for the amount of intermittent and remittent fevers found along their border.

This great distinction of surface, has from the first widely separated the character of the diseases prevailing in the northern and southern sections of the county. In the town of Pompey, situated in the south-eastern part of the county, typhus or typhoid has long been the prevailing type of fevers; while physicians to the north, rarely if ever saw the disease, or if so it was the product of importation.

I reside in the village of Baldwinsville, on the north bank of Seneca river, and for the last twenty years have prosecuted my profession there and in its vicinity. As I intend to confine my remarks principally to facts falling under my own observation, they will generally be applied to the low alluvial portion of the county with which I am partially acquainted. In this part of the county, intermittents and remittents, have been the prevailing type of fever until within a few years. Few persons escaped them for more than a year or two, and it would be difficult now to find an old resident who has not had one or the other, more commonly both. Remittents

were formerly often fatal, now this is seldom the case. The treatment then, was antimony in emetic, and continued in febrifuge doses, cathartics of calomel and jalap, drastic bilious pills, Dover powders, blisters, and a torturing abstinence from cooling drinks.

Now from ten to fifteen grains of quinine, repeated once or twice at intervals of twenty-four hours, given as soon after the cessation of paroxysm of fever as may be, a full anodyne at night, with plenty of cool drinks, a cathartic of calomel as soon after the interruption of the paroxysm as convenient and proper, followed with an occasional pill of blue mass, or blue mass and aloes, completes the cure of either an intermittent or remittent fever. Judging from my own, as well as the experience of others, I am of opinion that quinine approaches as near a specific in the cure of a remittent as of an intermittent fever, and is of infinitely more importance in treating the former than the latter.

This practice has now been continued so long and with such uniform success, that the common people as often speak of breaking up a "bilious remittent" as of the ague.

No state of the tongue, the skin or the bowels, forbid its use, and the more violent the paroxysm the more certain the remedy. The more common errors which are fallen into in this treatment are a too small, and too often repeated use of quinine. In small and often repeated doses this agent harasses and irritates the stomach, an effect sure to be followed by debility, as is often seen in the administration of any of the bitter tonics, for a long time in succession. Another error consists in discharging your patient as cured as soon as the paroxysms of fever have left him. The animal economy has received a violent shock both in the inception and cure of the disease; the effects of both these are to be removed; the secretions are changed and nature must be helped to take on the normal healthy action in all the functions of the body. Until then he errs who pronounces his patient cured.

In the falls of '39 and '40 a fever prevailed which was new to us, and received different names, in various localities where it prevailed, applied as caprice or whim might indicate, to some one of its more prominent symptoms, as gastric, red tongue, black tongue, bilious-typhoid, typhus, and typhoid fever. The symptoms, as this extended nomenclature would indicate, were varied.

We commenced treating it as a bilious remittent fever, but soon found it was governed by other laws. Calomel, antimony, sudorifica and tonics, did no good, but often, very often, much harm. A red, dry and perfectly smooth tongue, a disordered bowel, a dry skin with continued fever would gradually come on, so that at the end of a week we had in truth a typhus fever. However, the disease was fatal but in a very few instances, although it prevailed to an alarming extent.

Physicians soon took the hint, and abandoned the use of heroic remedies, and put their patients upon treatment which might be called expectant, from the commencement, and the result was, that nearly all recovered, but after a long protracted run of from twenty to sixty days.

Since that time up to the last fall, almost all our cases of fever were typhus or typhoid, and in most cases were easily traced to an infectious origin. The disease has been gradually loosening all abnormal symptoms until at present a good synopsis can be found in Cullen's first lines, under the head of Typhus Mitior.

During the early part of the past season we had more of the distinct bilious fever, which has readily given way to the tonic, anodyne and alterative treatment. The most prevalent disease throughout the county, in both the summers of '47 and '48, has been dysentery. It has been more obstinate and protracted than usual, but has generally yielded to an anodyne and laxative treatment.

The use of calomel or what is generally termed "the alterative treatment," was not thought to be beneficial but often highly injurious.

My friend Dr. Taylor writes me that he used nitrate of silver in several protracted cases with manifest advantage. The city of Syracuse suffered most, but generally among children. Taking the whole amount of cases I think the disease was not unusually fatal.

Idiopathic jaundice has prevailed the last fall to such an extent as to put on the appearance of an epidemic. It yielded to an alterative and saline treatment in about two weeks, but left the digestion in a weak, irregular and unhealthy condition. Has this epidemic derangement of the digestive organs at this time any thing to do with the state of the atmosphere preceding the appearance of the Asiatic Cholera?

Scarlatina has prevailed in our county for the last eight or ten years, but generally in two sections at the same time. It has been seen in all of its grades, from the most mild to the most malignant, where the symptoms of illness was beginning to die.

Typhus fever exists in many parts of our county at this time, and in the village where I reside. It is mild in its form. Commencing with pain in the head and neck; soreness of the muscles of the eyes, neck and extremities; pulse and heat nearly natural; tongue with a heavy white coat of fur; bowels costive at first but soon becoming loose, with a tendency to fullness; deliriums at night; dullness of intellect; slowness and hesitancy of speech; the manner of which is so peculiar that a person acquainted with the disease would detect its existence by the ear alone. It may be fancy but to me the countenance seems to have a peculiar, slightly bloated, and leaden hue look, which holds through the whole course of the disease, be the event what it may. The face appearing nearly as full as in health although the extremities are wasted to a skeleton, the dark color only leaving with confirmed convalescence.

From my own observation and those of my friends who have seen much of the disease we are inclined to thing the disease idiopathic typhus fever, and no new disease, nor indeed a new phasis of typhus fever, but the plain typhus mitior of Cullen's nosological arrangement, a work which has not yet been equalled in its symptomatology. Of disease generally, our county offers nothing peculiar. Of its treatment, we can boast of as great a variety, as any county of equal extent, from the most energetic discipline of Armstrong down — down to the infinitesimal nothingness of Hahnemann. The doctrines of Broussais I think have greatly modified the treatment of disease throughout the civilized world, and the medical practitioner early in life, before

"His lyart haffets wearin thin and bare,"

adopts the cautious practice of age, treating disease on the expectant, rather than the curative plan of Reush and Armstrong. That the treatment of most diseases is much improved, is certain. That we are often too tentative and cautious, I think fully as certain. That our fevers are now mostly

typhus and require less depletion than the bilious remittent, no one will for a moment dispute, but that the pain in the head and back, the intense burning fever of a bilious attack, are now as ever, best combatted by an early bleeding, followed by other active depleting remedies, I think no one who continues to use them has any doubt.

The treatment proper for acute inflammation is the same now as formerly. Yet we do not bleed to subdue it neither so often nor so largely. It may not be necessary, but I have often, very often, had my attention drawn to the subject by cases of phthisis following an attack of inflammation of the lungs; and I believe that if we were too active in our former treatment of disease, we are often now found at the other extreme.—*Transactions N. Y. State Society.*

Spurious Quinine.—A distinguished chemist addressed us a note, last week, asking if it would not be advisable to let our medical readers know that they must be careful in purchasing sulphate of quinine, as there is a large quantity in the market shamefully adulterated, to the extent of twenty-five per cent. by analysis. So it seems that the new drug inspection laws cannot prevent all the fraudulent schemes in the matter of medicine. This one item of information shows very clearly that our apprehensions, some months since, were well founded, that the cheating in drugs would hereafter be accomplished at home instead of abroad. The advantages of changing the system, by Congress, are, that our own unprincipled dealers get a double profit. Formerly they sold the spurious articles already prepared; now they perform the adulterating manipulations themselves, and thus conduct a thriving business. An active demand for sulphate of quinine has grown out of the California epidemic—the fact being notorious that intermittent fevers are one of the accompaniments of gold hunting. This circumstance, therefore, has very likely induced individuals to exert themselves with activity, to supply the demand, so that all who wish may carry a bottle to the new El Dorado. One of the most lamentable features in this abominable deception, is, that there are no legal means of arresting the sale. Even arsenic and prussic acid may be sold at the corners of the streets, by apple-boys, for ought we know to the contrary, without trespassing upon any law or ordinance existing in this ancient Commonwealth. Notwithstanding the national law, therefore, in regard to drugs and medicines, the ingenuity which has been developed is working immense mischief.—*Boston Med. and Sur. Journal.*

Belladonna in the Nocturnal Incontinence of Urine in Children.—M. Trousseau narrates the case of a girl, five years old, who, since her third year had been the victim of this obstinate complaint. No effort was neglected on the part of the parents to remove the habit; but all the means adopted—some of them sufficiently severe—were without effect. A pill, containing one centigramme of the extract of the powder and half a centigramme of the extract of belladonna, was ordered to be taken every night at bed-time. During the first week two nights were passed without accidents; and from that time, with two or three exceptions, the complaint entirely disappeared. The treatment was resumed from time to time for

nearly a year. This is only one of several cases occurring, as well in his own practice as in that of M. Bretonneau, in which Professor Troussseau has observed marked benefit from the use of this drug.—*L' Union Med.*, Oct. 14, 1848.

In a more recent number, Oct. 21., of the same journal, Dr. Bache, physician to the Hospital des Enfants, records two very obstinate cases of nocturnal incontinence of urine, occurring in individuals, one fifteen and the other eighteen years of age, where mercurial and sulphurous baths, refrigerant and astringent applications, tonic and ferruginous medicines, tannin, ergot of rye, nux vomica, and all other means had failed. Ultimately belladonna was exhibited with complete success.—*Monthly Retrospect*, Dec. 1848.

Case of Separation of the Stomach from the Œsophagus.—By THOMAS M. FLINT.

PROF. DUNGLISON.

Dear Sir :—By your request I furnish you the particulars of the case in which softening of the stomach was found to have occurred. The attending physician, who is a respectable graduate of this school, has given me the following statement of facts: "The patient was a male child; aged seven years; sick about three weeks; symptoms of worms were prominent—one was passed; cerebral symptoms followed, which terminated in death. Coma and unconsciousness were prominent symptoms for ten days previous to death. When roused from this state he would eat a small quantity of gruel. He was treated for worms and cerebral symptoms."

On the 4th inst., thirty-six hours after death, I opened the body in the presence of the attending physician and a member of this class. We carefully examined the intestines, beginning at the rectum and tracing the tube up to the connection of the duodenum with the stomach, without meeting with a worm of any kind; but noticed marked inflammation of the small intestines. We next directed our attention to the stomach itself, which, to our surprise, was found to be severed from its connection with the œsophagus, and its contents, a dark-brownish mucilaginous-like fluid, poured out into the cavity of the abdomen to the left of the spinal column. We were not prepared to meet with a lesion of this character, and could account for it only by the action of the gastric acids producing *ramollissement* of this organ after death. In this opinion we were confirmed by the appearance of the liver; for beside evident marks of acute inflammation, the inferior edge of the left lobe, which had been in contact with the gastric fluid, was corroded and corrugated.

That you may have the opportunity of examining the case, I herewith deliver to you the stomach and liver taken from the patient at the post-mortem.—*Med. Examiner*.

Camphor and Chloroform Mixture. By T. & H. SMITH. (*Monthly Jour. & Retrospect of the Medical Sciences*, Nov. 1848.)—There is great difficulty, or rather an utter impossibility of administering camphor in a state of solution in doses of sufficient potency in some cases. The form of pill, the only mode of giving large doses of this medicine, is objectionable in many cases, and in others altogether inadmissible. The camphor being

merely in a state of mechanical division, on being set free in the stomach, from its extreme lightness quickly separates and floats about, thus producing in many cases much local irritation in that organ, instead of soothing or arousing the general system.

Messrs. T. & H. Smith, Chemists of Edinburgh, give a formula for exhibiting camphor in doses of almost any amount of strength—certainly as large as any case can require—and that in a state of perfect solution; thereby allowing of a nice adaptation of the dose to the circumstances of each case.

The formula is as follows:—Three drachms of solid camphor are dissolved in one fluid drachm of chloroform. This is, perhaps, one of the most remarkable cases of solution the whole range of chemistry presents to us. The solution is most *rapid and complete*, and the bulk of the liquid is now increased from one to fully four liquid drachma. This solution rubbed up with the *yolk* of one fresh egg, may be formed into an extremely elegant emulsion by the addition of water, without the slightest separation of the camphor or chloroform; in fact, no separation of any kind takes place. If to the proportions given above as much water be added as to make a four ounce mixture, each tea-spoonful of the mixture when formed will contain about five and a half grains of camphor, and about two minims of chloroform. The capability of the formula being varied, either the camphor or chloroform may constitute the predominating ingredient, must be quite obvious. This mixture can be administered in any ordinary vehicle, such as water, without the occurrence of any separation; indeed, the mixture is as readily and completely effected as cream with tea or coffee. We have tried the effect of several medical substances on the mixture. With none of them has any separation been caused.

Cure for Hiccups.—Traveling some time since, by rail-road, from Columbus to Baltimore, I took my seat immediately in front of a gentleman who was suffering under a paroxysm of hiccup, to a degree that I had never before witnessed. In a few minutes a person appeared from the end of the car, and took a seat beside him, when he said, 'Sir, can you tell me what is good for the hiccups? I have been afflicted in the way you see me, since yesterday noon, and have had no rest, or relief from a physician to whom I applied for assistance; I am worn out with suffering.' To whom the person replied, 'Sir, I will cure it in less than two minutes, by your watch; have confidence, for I am sure I can do it. Hold up, high, above your head, two fingers of your hand; lean back in your seat, opening your mouth and throat, so as to give free passage to your lungs; breathe very long and softly, and look very steadily at your fingers.' In less than the time specified, the cure was performed, one hiccup only occurring during the trial. The patient could not express his gratitude, while the practitioner only exacted from him, as a fee, the promise that he would extend the knowledge which he had imparted, as freely as he had received it, assuring him that he would never be disappointed in the result.

We were all struck with the fact, and many of us considered that the stranger was sent by the appointment of that Power, often designated as a *particular Providence*. Since then, I have often had occasion to practice upon patients, in the same disorder, and never without the most signal success.—*Southern Med. and Surg. Journal*.

The Intention of Hiccup.—In the convulsive movement of hiccup, the diaphragm is depressed; the larynx is raised, and the glottis is closed. What would be the effects of these conditions? The depression of the diaphragm would tend to expand the cavity of the chest; but the glottis being closed, no air can enter the lungs. The two ends of the cesophagus are, however, still open, and if the hiccup be strong enough, air will enter the cesophagus at both ends. If a person will make a prolonged, voluntary effort of the conditions which occur in hiccup, he will find a portion of air sucked, as it were, into the cesophagus, from the pharynx. Now, spasmodic hiccup is a reflex movement, excited, in general, by gaseous irritation of the stomach; under these conditions, the hiccup will suck the air of the stomach into the lower extremity of the cesophagus. This, then, is the intention of hiccup—to pump off the air of the stomach. The movement of the hiccup sucks the gaseous contents of the stomach into the lower extremity of the cesophagus, and an inverted action of the cesophagus, propels them upwards and discharges them at the pharynx.—*Prov. Med. and Surg. Journal.*

EDITORIAL DEPARTMENT.

Buffalo Medical College. Commencement.—The public commencement exercises at this Institution, took place on the evening of the 18th ult., at the First Presbyterian Church. The exercises were opened with prayer by the Rev. Mr. Thomson, pastor of the church. Music by the choir of the church followed. The degrees were then conferred by Dr. Thomas M. Foot, in the absence, from the city, of the Hon. Millard Fillmore, Chancellor of the University, upon the following gentlemen:—

John D. Hill, N. Y.; Geo. W. Smith, N. Y.; John W. Jones, Ohio; Chas. H. Swain, N. Y.; Dix. A. Shevalier, N. Y.; Eldred P. Grey, N. Y.; N. R. Derby, Pa.; F. F. Hoyer, N. Y.; W. D. O. K. Strong, N. Y.; Levi Aldrich, Michigan; Joel Green, jr., Ohio; Wm. H. Watkins, N. Y.; Nelson Saunders, N. Y.; Judson Bowen, N. Y.; W. D. Fitch, Canada West; Daniel Wilson, Canada West; Wm. Henry Borden, N. Y.; Robert Mitchell, jr. N. Y.; Robert Gilfillan, Michigan.—Total 19.

After the degrees were conferred, a valedictory address to the graduates was pronounced by Prof. C. A. Lee, replete with elevated sentiments, and valuable counsel, conveyed in a chaste and classical style. The delivery of the address occupied an hour and a quarter, and we have rarely known the attention of a mixed auditory so perfectly preserved as it was on this occasion.

The exercises closed with music by the choir, and benediction by the Rev. Mr. Thomson.

Buffalo Medical College.—The annual return of the commencement, terminating the third session of the Buffalo Medical College, has suggested that some of the not inconsiderable number of readers of this Journal, added during the last two years, may desire to know more particulars of the history and prospects of the Institution, than have been gathered from our pages during the period just mentioned. We purpose, therefore, to give a brief sketch of its rise and progress, together with some account of the new College edifice, now in progress of completion. This Institution, although youthful in years, has attained a position (we may be permitted to say) which is in a high degree gratifying and encouraging to those who have been thus far identified with its history. It has had various obstacles to surmount, some of which have been of no ordinary character. We do not, however, design at this time, to consider these. We have no desire to perpetuate the recollection of them in the minds of those to whom they have been familiar, still less, to obtrude them upon the attention of others. Let them be forgotten, as we trust, they may be, ere long, by all!

The formal movement for the establishment of a medical College in this city, originated in the summer of 1846. It was at first intended to apply to the Legislature for a charter for a medical College exclusively, but it was afterwards concluded, at a convention of some of the most intelligent and influential citizens of the place, to make application for an University charter, embracing full powers to establish a medical department. The plan of a medical school in this city was not a novel one. The many advantages which Buffalo affords for such an Institution, had often suggested it, and projects had previously been entertained, which, however, it was never attempted to carry into execution.

The *University of Buffalo* was chartered during the Legislative session of 1846. Hon. Nathan K. Hall was the representative at the Assembly, at that time, and it was chiefly through his judicious, persevering efforts, that the charter was promptly obtained.

The medical department of the University (the only department as yet established) was organized in August, 1846. The present Faculty were then appointed, and the first lecture session was in the spring of 1847. Notwithstanding the short period between the issuing of the circular in the autumn of 1847, and the commencement of the term, the first class numbered more than sixty. The class assembled at the second session, in the spring of 1848, exceeded ninety in number. At the close of that session, it was concluded to adopt the plan proposed by the *National Medical Association*, of a longer term of instruction, and the session of 1848-9,

which is just concluded, was accordingly extended to five months, to which was added a preliminary term of one month, chiefly devoted to dissections. Other recommendations by the National Association, not previously instituted, were adopted, the aim of the Faculty and Council, being to secure for the school a position which should entitle it to the respect and support of the profession. We believe we may say with all sincerity and truth, that the intrinsic and permanent character of the Institution, in every measure pursued to subserve its interests, has been held paramount to objects of a personal or selfish nature. The Buffalo College was the fourth, in the order of time, to extend the lecture term, and the only Institution northwest of the city of New York, that has adopted this change. One, only, of the two medical schools in the city of New York, has adopted it. The medical school of Boston, Mass., still adheres to the usual period, four months; while the several Institutions with which the Buffalo school, from proximity, must be brought, necessarily, more or less into competition, have not signified any intention of conforming to the recommendation of the Association. Under these circumstances, it has been resolved by the Buffalo Faculty, to return to the four months term, retaining, however, the preliminary term of one month, and adding daily lectures, on special subjects, to dissections during this term, making attendance not obligatory, but voluntary and gratuitous.

The lectures, dissections, &c., at this Institution, have heretofore been held at the building on the corner of Washington and Seneca streets, which was leased for a period of three years, for that purpose. Although it was extremely fortunate that a building was to be had, suitable for immediate necessities, it appeared important, in order to place the Institution upon a firm and permanent basis, that an edifice should be erected, adequate to prospective wants, and constructed with entire reference to purposes of medical instruction. For this end a subscription was commenced in the summer of 1847, and, in a short time, the sum of twelve thousand dollars was obtained, mostly in subscriptions of one hundred dollars, payable in four equal, semi-annual instalments. This, added to two thousand dollars appropriated by the State, was regarded as sufficient to authorize the commencement of a new edifice, which has been enclosed, is now in progress of completion, and will be in readiness for the session of 1849-50.

The ready and cheerful liberality which has been manifested by our citizens in the subscriptions for the erection of a College edifice will never be
ed from the grateful recollections of those connected with, and the

immediate friends of, the school; nor will their names be forgotten as the first benefactors of the Institution, so long as it shall continue to exist. May the future history of the College afford more and more occasion for satisfaction to them, in the reflection that its success was, in a great measure, due to their timely and generous assistance!

The public spirit exhibited by these subscriptions is enhanced by the fact that they were made without any expectations of *pecuniary return*. The subscribers are stockholders to the amount of their subscriptions, but receive no dividends, nor interest. The stockholders, however, are the managers of the University, being the electors by whom the members of the Council are chosen. The present stockholders are mostly from the young business men of this city, than whom a more generous, enterprising, intelligent class, could with difficulty be found in any community. Their names are too many to be here enumerated. We may, however, without invidiousness, state that the first who enrolled his name as a subscriber was A. D. Patchin, Esq., attaching to his signature the sum of five hundred dollars. The largest subscription was by Jesse Ketchum, Esq., viz, six hundred dollars. Hon. Albert H. Tracy subscribed two hundred dollars; George W. Tift, Esq., two hundred dollars; Hon. E. G. Spaulding, and Jabez Goodell, the same amount. About eighty subscribed one hundred dollars, and the balance was composed of subscriptions for sixty, and a few of forty dollars. These contributions were freely and promptly made, on a representation of the importance of the object for which they were designed, and we have no doubt, that should a further amount be required to be raised in the same way, an appeal would not be in vain. To the reader who resides in a larger and older city, it may, perhaps, seem that the liberality of our citizens, in this enterprise, is not so remarkable as to merit special eulogium. Instances of as great, or greater public generosity, are not, it is true, very infrequent. But, it is to be considered, in the first place, that the public have seldom exhibited much interest in, and disposition to contribute to the support of institutions for medical instruction. We doubt if another instance can be cited, in which the amount contributed by the citizens of Buffalo, has been raised in a similar manner. We do not say that similar instances may not have been, in this country, but we are not aware of there having been any. But, in the second place, many circumstances pertaining to a new city, like Buffalo, are to be taken into account. Our population, for the most part, is composed of young men, who come here to make up for want of pecuniary means, by enterprise and industry. We have not the men of wealth, and overplus of

capital, which belong to older towns. The opportunities for business preponderate over the amount of money which might be profitably employed. Moreover, the necessary public expenditures in a new city, for laying out and paving streets, constructing sewers, and other improvements, render taxation heavy. Hence, the liberality of a contribution for an educational object, in which the contributors are not directly interested, is not to be measured by what may transpire in other places, where the circumstances just referred to, are widely different.

One of the advantages which this city presents for medical education consists in the opportunities which it affords for clinical illustrations of disease and surgery. For the two first sessions, these branches of practical instruction were chiefly confined to patients, presenting at a public dispensary for medical and surgical cases at the College. During the summer of 1848, however, a hospital was established, and placed under the direction of the Sisters of Charity, which soon was in successful operation. Fortunately for the interests of both Institutions, the building selected for the hospital, is situated but a few rods from the new College edifice. A proposition, on the part of the Faculty of the College, to render, gratuitously, medical and surgical services, was gladly accepted by the managers of the hospital, who, also, consented that, at stated times, under proper regulations, medical students might be admitted to visit the wards, in company with the attending physician and surgeon, on payment of a small fee, for the benefit of the hospital. This arrangement was at once entered into, and during the session just ended, highly valuable opportunities for witnessing surgical operations, the phenomena of disease, and the application of the principles of diagnosis and therapeutics, were afforded to those who chose to avail themselves of the hospital ticket.

The hospital has recently been placed on a broader and more permanent basis, by an appropriation of nine thousand dollars by the state Legislature, and the building, already adequate to receive one hundred patients, or more, is to be enlarged by the erection of another building, affording accommodations for nearly twice that number. All that could be desired, with respect to clinical instruction, is thus offered by this hospital. Indeed, as remarked by Prof's. Elliotson, Latham, and others, a hospital of moderate size, is better for the student, than one which is very large. A number of cases beyond what can be daily and carefully examined by the attending medical officers, and their history and progress, individually, followed by the student, proves a serious obstacle in the way of both teacher and pupil. The attention is overtasked and confused, to the

inconvenience of all parties, inclusive of the patients. It is not the aggregate number of cases that are seen, that renders hospital observation valuable, but the care and attention which are bestowed upon their study. A hospital with an hundred, or hundred and fifty beds, if it receive a sufficient variety of cases, is sufficient for all the purposes of clinical instruction, and, in our opinion, much increase beyond this size, is to be regretted, rather than desired.

The remainder of this article will be devoted to a description of the College edifice, condensed from an article which appeared several weeks ago, in one of the daily papers of this city.

The building is situated on the corner of Virginia and Main streets, at a pleasant part of the city, somewhat elevated, and sufficiently removed from the centre of business, to be free from the noise and disturbance of the latter. It is one hundred feet long, by fifty-six wide, and four stories high. The style of architecture is Norman, or, more properly, Romanesque, a style regarded as peculiarly appropriate for buildings designed for similar purposes. The windows are arched. The walls are of the Lockport red sand, or free stone, resembling the New Jersey red stone, of which Trinity church, N. Y., is built. They present a rough, unhewn surface, the effect of which is to give an appearance of massiveness, age, and strength to the building, and accords with the style of architecture adopted.

The Faculty of the College, before determining on any plan to recommend to the Council, sent a delegate to New York and Philadelphia, to make personal examinations of the College buildings, and to obtain accurate admeasurements. From the information thus collected, plans were digested, which, it is believed, will render the building one of the most convenient structures for the purposes for which it is designed, in the country. The plans were executed by the talented artist, C. N. Otis Esq., now in Europe.

The centre of the building is devoted to two large rooms, the anatomical amphitheatre, and College Hall, or general lecture room. The width of each is forty feet, and the length fifty feet. The height of one is twenty, and of the other thirty feet. Each will seat, comfortably, from three hundred and fifty, to four hundred persons.

In front, the first floor on each side of the hall, is a room for office and library, a little more than twenty feet square.

The three remaining stories in front, to the extent of the entire width of the building, (fifty feet) are appropriated to a general and anatomical

museum. It is to be galleried, and to run up to the roof, which is to be paneled. In the centre of the roof is to be a sky-light, with stained glass. This plan provides most ample room for an extensive museum, and will present a very beautiful effect.

In the rear of the building, on the first floor, and connected with the general lecture room, are large rooms for the convenience of the lecturer on chemistry, laboratory, and a private room for other Professors.

On the second floor, in the rear, are several rooms for the use of the Professors.

The rear of the two upper stories, embracing the entire width of the building, is devoted to dissecting rooms.

The basement embraces apartments for the accommodation of the Janitor.

The work of completing the building is now in rapid progress, and the lectures for the session of 1849-50, Providence permitting, will be therein delivered.

The American Medical Association and Medical Colleges.—The last No. of the New York Annalist, contains a series of resolutions, recently adopted by the New York Academy of Medicine, the burthen of which is the old story of rendering the degree of Doctor in medicine nugatory as a licence to practice. The Academy earnestly solicits the American medical Association to bring "the subject before the Legislatures of the several States, to procure the passage of such enactments as shall produce this important result."

The Editor of the Annalist states, that "the object sought for by these resolutions is well known to be the identical one that first gave rise to those movements in this state which resulted in the call for, and the final successful organization of the National Association." We presume this may be the case, and the editor of the Annalist is doubtless a competent witness on the subject, in as much as he was the one to move at the meeting of the N. Y. State Society a resolution for the call for a Convention, and was Chairman of the Committee appointed to carry the resolution into effect, of which fact the medical public have not been allowed to remain unreminded. But granting all this, we are at a loss to see why the motives and ends of the mover of the resolution, and some others, should furnish rules for the guidance of the Convention, and Association, resulting as a consequence of the action of the New York State Society. This matter referred to was brought up at the first Convention, in New York, and a committee, after

considerable discussion, appointed to report especially upon it. Two reports were submitted by the Committee, and acted upon at the meeting of the Association the following year at Philadelphia. The members of the Association at this meeting did not see fit to concur in the wishes of those who, for this single object, had labored to bring the Association into existence. Whether the subject was again discussed at the meeting at Baltimore, the following year, we are unable to say, without consulting the transactions. Yet, certain it is, that the Association did not at that time deem it expedient to gratify the few gentlemen who had engaged in the enterprise with this one idea. These successive failures in a predetermined plan, however, do not appear to discourage other efforts; and now it is announced the New York Academy of Medicine has been persuaded to move in the matter, in order to bring the subject again before the Association under better auspices.

The merits of this project we do not intend to discuss at any length. We deem it unnecessary to do so. Its impracticability, uselessness, and absurdity, have again and again, been demonstrated. It requires, in the first place, an united legislative action by the several States, which could never be attained, and which, it is generally supposed, if procured, would be unconstitutional, from its conflicting with rights already vested in corporate institutions. Putting all this out of question, what reasons can be assigned for supposing that a board of examiners composed of medical men not engaged in teaching, would be more competent to decide on qualifications for practice, or would be more strict in their requisitions, than a board consisting of, or, at least, embracing, professors in a Medical College? On the other hand, are there not some circumstances which should give teachers an advantage in estimating the abilities and attainments of medical pupils? They have been associated for months, and thus have had ample opportunities to become intimately acquainted with their characters, habits, and attainments. They are, it is to be presumed, more familiar, each with the details of the particular department which it is his province to teach, so that they should be better prepared to conduct a private and thorough examination. The responsibility to the medical profession is certainly as great in the one case as in the other, and in the case of those connected with Medical Schools, there are additional responsibilities arising from the fact that the character of the Institution is in no small measure involved in the character of its Alumni. We have never heard any reason assigned in favor of the proposed change, except the paltry insinuations, that teachers may deem it an object to induce students to attend at insti-

tutions with which they are connected, by holding out the prospect of a diploma on easy terms; and that the graduation fee is, virtually, a pecuniary bribe. The latter insinuation is easily disposed of, since, so far as our knowledge extends, the Professors of Medical Schools have no participation in the revenue from graduation fees; and the former like the latter, in our humble estimation is an insinuation unworthy to spring from a generous mind. Do the advocates of this proposed measure of reform really regard the Medical teachers of this country as so meanly selfish, corrupt, and dishonest a portion of the profession, as to merit such an imputation! We know not that any peculiar prerogatives belong to the position of a Medical Teacher beyond the addition of not a small amount of toil, and anxiety, with, generally, an inconsiderable amount of profit; but it does seem that the office should not disannul claims upon brethren of the same profession for ordinary respect and courtesy, or, to say the least, the exercise of common charity. The insulting nature of the suspicions so freely uttered by some restless spirits, appears to be quite lost sight of, from the frequent indulgence of opprobrious charges, and the eagerness to accomplish the desired ends. And what are these ends? Do they relate, purely and exclusively, to the improvement of Medical education? If so, why not attempt to make Medical Institutions better, if they are defective! Why not investigate malversations and corruption, if they are believed to exist, and endeavor to reform existing Institutions, and elevate them to be all that could be desired! This would be assuredly as effectual a remedy for existing evils (assuming that evils do exist) and far more practicable than the scheme which arises to depreciate and embarrass Medical Colleges.

Whatever may have been the intentions which prompted the movement resulting in the formation of the American Medical Association, we trust that the Association, as formed, will continue to repudiate all factious and disorganizing plans. United zeal and action for the promotion of legitimate and proper ends, will render the Association invaluable to the medical science of this country, and highly conducive to the honor and best interests of the profession, but if it be permitted to become the arena of intrigue, discord and strife, it requires no seer to predict its destiny.

New Books.—Several new publications have been received, but too late for notice in this number. We will endeavor to do them justice in our next.

Michigan State Medical Association.—The following report of the proceedings of a Convention lately held in Jackson, Michigan, which resolved itself into an Association, has been transmitted to us for publication. In the letter which accompanied it, the writer states, that "a general feeling of interest is awakened throughout the State on Medical subjects. I think our Convention will do something towards elevating the profession. Its formation has been hailed with pleasure by Medical gentlemen over the State." We heartily wish success to the efforts of our brethren who have been active in this movement.

JACKSON, Jan. 3d, 1889.

At a meeting of delegates to attend the State Medical Convention, called by the Genessee Co., and Jackson Co., Medical Societies, for the improvement and elevation of the Medical Profession in this State—Dr. John Cadman, of Lenawee, was appointed Chairman, pro tem., and D. Laskie Miller, of Genessee, was chosen Secretary pro tem.

On motion of Dr. Graham, of Genessee, a committee of three was appointed to report a plan for the organization of the Convention.

The Chair appointed Drs. Graham, Eldredge, and Cornell said committee.

On motion of Dr. McNaughton, of Jackson, a committee of three was appointed to receive credentials of delegates, and report the names of gentlemen entitled to seats in the convention, Drs. McNaughton, Backus and Hoyt, were appointed said committee.

On motion of Dr. Eldredge, of Lapeer, the committee on credentials was instructed to report the name of one individual for President, two for Vice Presidents, and two for Secretaries.

On motion of Dr. Fish, of Jackson, the convention adjourned until half past one o'clock, P. M.

AFTERNOON SESSION.

The convention met agreeably to adjournment and was called to order by the Chair.

The committee appointed to report a plan for the permanent organization of the convention, through the Chairman, reported a plan for the organization of the *Michigan Medical Association*, which was accepted and adopted.

The committee on credentials read their report, which was accepted.

The convention then proceeded to the election of officers for the ensuing year, which resulted as follows:

For President,—Dr. John Cadman, of Lenawee.

1st Vice President,—N. Buel Eldridge, of Lapeer.

2d Vice President, B. Hard Van Buren.

Secretaries, D. Laskie Miller, Genessee; M. A. McNaughton, Jackson.

Treasurer, D. Sager, Washtenaw.

Dr. Fish offered the following:

Resolved, That it is the duty of Physicians, in their individual capacity, as well as in their associations as County or State Societies, to withhold

their patronage, as far as practicable, from those drug stores that are engaged in vending secret nostrums.

Which was discussed freely by Drs. Backus, Graham, Eldredge, and McNaughton, and adopted unanimously.

The President announced the standing committees, as follows:

On arrangements, Drs. Higby, Graham and Snyder.

On practical Medicine, Drs. Sager, Camburn, and Spencer.

On Surgery, Drs. Gunn, Marsh and Douglass.

On Obstetrics, Drs. Cornell, J. N. Graham, and Fish.

On Medical Education, Drs. Stetson, Palmer, and Fairbank.

On Publication, Drs. Miller, McNaughton and Sager.

The Association then adopted the code of Medical Ethics adopted by the American Medical Association.

On motion the Association then proceeded to elect five delegates to attend the next meeting of the American Medical Association, which resulted in the election of Drs. N. Buell Eldridge, of Lapeer, M. Gunn, of Washtenaw, John Cadman, of Lenawee, A. Sager, of Washtenaw, and A. B. Palmer, of Lenawee.

On motion of Dr. Palmer.

The delegates to the National Association were authorized to appoint substitutes in case of their inability to attend.

Dr. Eldridge offered the following:

Resolved, That the Physicians of Jackson are entitled to, and do hereby receive our thanks for the kindness extended to those from abroad, while attending the meeting of this Association.

Carried unanimously.

On motion of Dr. Fairbank.

Resolved, That when we adjourn, we adjourn to meet at Ann Arbor on the 3rd Wednesday of January, 1850.

Dr. Graham offered the following:

Resolved, That the President of this Association be requested to deliver an Address at the next meeting of the Association, with power to appoint an alternate—which was adopted.

On motion of Dr. Fish.

An abstract of the proceedings of this meeting, was ordered to be published in the papers of this place.

JOHN CADMAN, *President*.

Appended to the report were the names of the Secretaries of the convention, which have, accidentally, been partially torn off in the copy sent to us, and we are therefore obliged to omit them.

Channing on Etherization in Child Birth.—Inquiries having been frequently addressed to us respecting this new work, we would inform those desirous of obtaining it, that a supply of copies has been obtained by G. H. Derby & Co., booksellers of this city, who will be happy to answer orders for this, and other Medical books, promptly.

Elementary Anatomy, in Sixteen Plates.—Representing the full-length human figure, half the size of life. Together with a separate explanatory text. The whole forming a concise Manual of Physiological Anatomy. Intended for the use of Physicians, Medical Students, Naturalists, Painters, Sculptors, Lectures on Anatomy, Schools, Families, and in general for all who wish readily to acquire a knowledge of the organization of the human body. From the French of Bourguery and Jacob. The text translated by J. C. Comstock, A. M. Kelloggs and Comstock, Publishers, 150 Fulton Street, New York, and 136 Main Street, Hartford—1849.

We have examined the Anatomical plates of which the above is the title, and, in our opinion, they are scarcely, if at all, inferior, to those in the celebrated work of M. M. Bourguery and Jacob, entitled, "*Anatomie Elémentaire*," of which they are copies. They are furnished at one half the price of the French plates. We would commend them to Medical Students, Practitioners, and others, as affording valuable aid in the study and review of Anatomy.

Vacant Professorships.—Several professorial chairs in different Medical Institutions have lately been made vacant by deaths and resignations. The demise of the late lamented Drs. Carpenter and Harrison, leaves two vacancies in the Louisiana Medical College. Dr. Thomas D. Mitchell has resigned the chair of Materia Medica in Transylvania University, Lexington Kentucky, and Dr. Henry M. Bullett, of Louisville, has been appointed to fill his place. Dr. Donne, has retired from the chair of Anatomy in the Memphis Medical College. Dr. Bartlett, of Transylvania University, has resigned the chair of Medicine. Dr. Drake has severed his connection with the Louisville Medical School, and has resumed the practice of Medicine in Cincinnati, Ohio. Dr. Fitch, late Professor of Theory and practice of Medicine in the Rush Medical College, Chicago, has resigned. None of the foregoing vacancies are filled, to our knowledge, with exception of the chair of Materia Medica at Transylvania, as already stated. Here are chances for aspirants for professorial labors!

Buffalo Hospital of the Sisters of Charity.—We are gratified to announce the passage of a bill by the Legislature of this State, granting an appropriation of *nine thousand dollars*, for the benefit of this most excellent charity. This timely and generous support will enable the Institution to extend its scope of charitable relief, and places it upon a permanent basis. It is to be at once enlarged by the erection of a new building. The present accommodations are not adequate for more than one hundred

patients. The proposed additions, will nearly double its capacity. A public hospital has long been a great desideratum in this city; and, inasmuch as other efforts to provide for the necessities of the suffering sick have proved abortive, the community, and especially they who need the benefits of an Asylum in disease, are under infinite obligations to those by whose philanthropic exertions this charity has been established.

Conclusion of Volume.—With this number the *fourth* volume of this Journal terminates. The same arrangements as heretofore will continue. The publishers desire to say that the appearance of the work will be improved by a better quality of paper than has heretofore been used, and that this number, in this respect, is a specimen of the *fifth* volume. We tender our thanks for the increased, and increasing patronage extended to the Journal, and to our correspondents for their valuable aid. The index and title page to the volume just concluded, will accompany our next number. Subscribers will please take notice of this, and not have the volume bound prior to the reception of the June number.

Editorial Changes.—Some further changes in the Editorial corps have recently taken place. Drs. Drake and Colescott have retired from the *Western Journal of Medicine and Surgery*, and Dr. Lunsford P. Yandell remains as the Editor, assisted by Dr. Theodore S. Bell, who was formerly connected with the work.

Dr. A. Hester is now the sole Editor of the New Orleans Medical and Surgical Journal. Dr. Harrison, formerly one of the Editors of this work, resigned on account of ill health, and is since deceased. Dr. Harrison was a talented writer, and in his death the Profession of New Orleans has sustained a loss which will be deeply felt.

American Medical Association.—Before this number is received by our readers, the meeting of the Association will have taken place. We learn from the Boston Medical and Surgical Journal, that Dr. Bowditch, of the committee on reception of delegates, has been notified of the appointment of a large number coming from every quarter of the Union. The attendance will probably be larger than at any previous year of the existence of the Association. We hope to be present, and shall endeavor to give some account of the proceedings in our next number.

Popular Hygienic and Medical Lectures.—For the past eight or ten weeks, our city has been visited by one of the numerous fraternity of self-styled "Professors"—save the mark! In these latter days of plenitude of diluted knowledge, we have such Professors made by imbibition from the Pierian spring, as a sponge absorbs water. This prefix is unfurled by almost every rover in the high seas of science, art, or even mechanical occupation, and they thrive by it; therein lies the secret; driving a flourishing business, by preying upon the full-freighted credulity, or curiosity of a portion of community, mentally endowed and fitted to their designs.

As this "Professor" has had a more than usual success in his slight of hand practices here, we are tempted to step aside from our prescribed course, and exhibit some of the mysteries latent, now unfolded by him. The almost defunct *science* of Mesmerism, as used for medical purposes, has been galvanized into new being, to suit his purpose, and now we are informed by him, that the galvanic and the mesmeric agent are identical! His want of success in procuring the requisite number of subjects for an evening's exhibit, is apologised for, by account of the extreme heaviness of the air, and this on a rainy day!—with sundry other *new facts*, set forth in what is called a series of lectures, defying the king's English, and withal, so disjointed, as not to contain enough of dis severed members to admit of dissection by the veriest tyro of a school-boy, read in Lindley Murray, or besmattered in any science, by him referred to. By vote of his audience, so says drill sergeant puffer, in the daily papers, he prolongs this fare to the eighth course, by unanimous vote of his audience. Yet night after night, his audience has been numerous, and, as a whole, respectably attended! The usual newspaper puffs have been proffered liberally, and scarcely exceeded by the effrontery of his own announcement. "By the unanimous request of the Young Men's Association," whose rooms he occupies.

That the Young Men's Association will realize quite a harvest, to add to their scanty funds, in use of their name, unasked, gleaned by lease of rooms for such purposes, is all the good we can discover from this not only high-handed effrontery, but crying ill of the times—a contraband exhibit of spurious wares, misnamed scientific lectures, on medical topics, nominally by a titled Professor.

Similar in design, if not in character, are the lectures periodically given by a so-called Dr. Whiton, of whom we know but little, but presume, from his practice, to be the itinerant vender, acting as agent for some one of the many manufacturers of patent shoulder-braces. We need not, to the

medical man, say, of no earthly application can shoulder-braces be, as a remedial agent for phthisis tuberculosis, for which they are commended. Many have been first duped to believe they were afflicted with the disease, and then induced to wear them, thus suffering mentally, physically, and finally, to the extreme of their pecuniary ability.

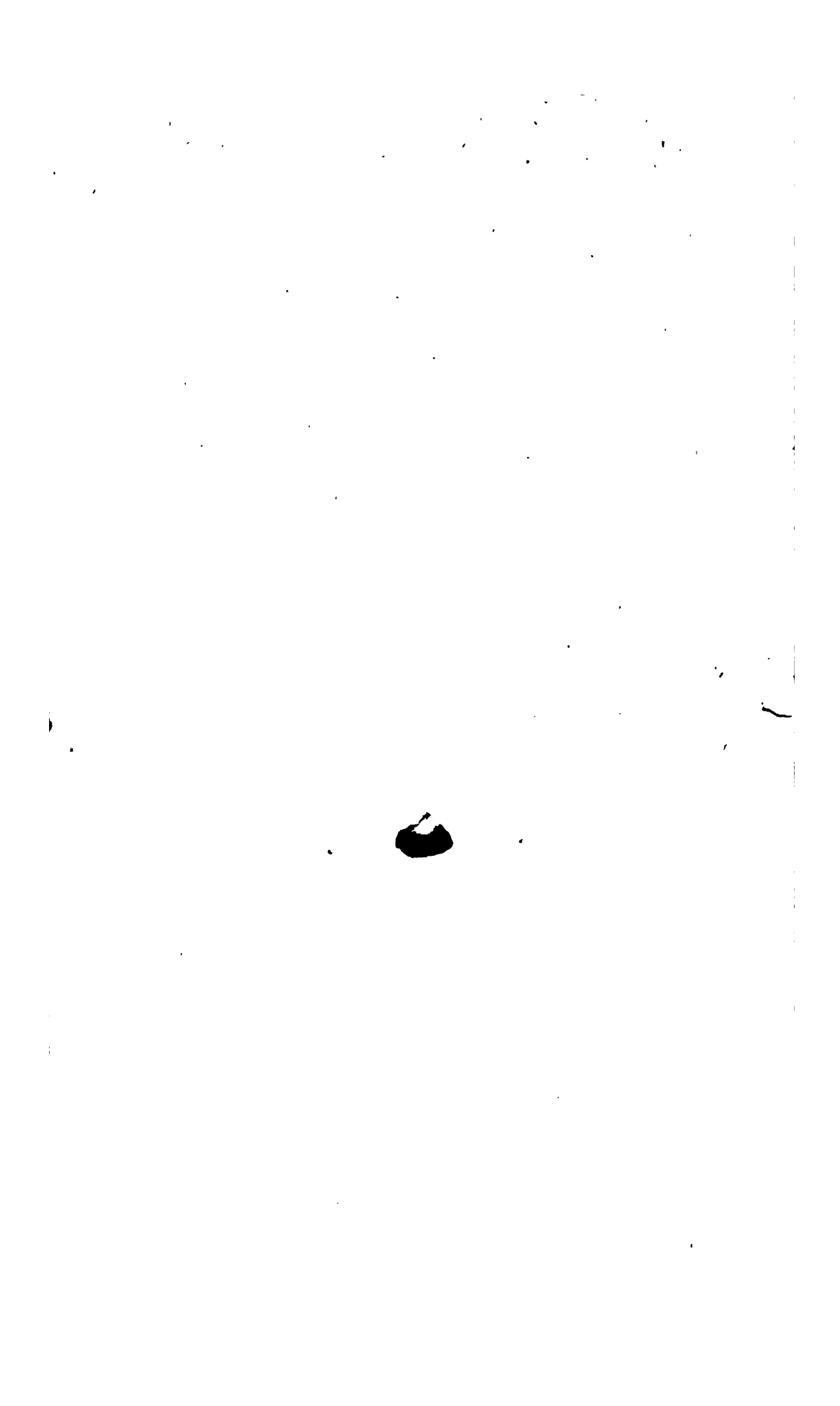
As we remarked of the "Professor," and he is but one of a genus, (so is it true of this lecturer,) he succeeds in commanding marvelously large audiences—audiences far out-numbering usual attendants upon those lectures, the subjects of which are selected with greatest care, by men known for their attainments, and constituting a literary and scientific course before the Young Men's Association, each winter season—a season of greatest leisure for lecture-going. We ask, why is this? Is there any peculiar pleasure in listening to a rehearsal of the physical ills of life, until wrought into excited belief of their self-verity? If there is, let these newly-infected Professors pander to the itch of such desire. But, if on the contrary, there is really, not a morbid, but healthful desire for knowledge of the laws governing our physical being, to the end that life may be cheered, preserved and prolonged, coupled with a rational love of learning, and this no idle curiosity, we would suggest that the Lecture Committee of the Young Men's Association, in their official capacity, first procure and then announce such a series as will meet that demand, the forth-coming lecture season.

W. T.

Obstetrical Forceps.—The reader will observe in this number an account of a newly devised Obstetrical Forceps by Dr. White, Professor of Obstetrics in the Buffalo Medical College, accompanied by a plate. We would commend this proposed instrument to the examination of Obstetricians. It has been submitted to the instrument makers of the city of New York, who unite in pronouncing it, in their view, superior to any other in use. It will be kept by Tiemann, the celebrated instrument maker in that city, and may be ordered there, or at A. I. Mathews, Druggist, of this place.

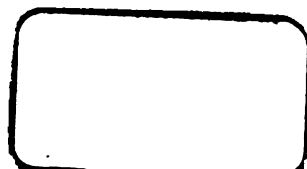
To Correspondents.—Dr. Rogers' communication was received after our original department was made up for this number. It will receive insertion in the June number.

The translated report by Dr. Bryan has been received, and will be inserted in our next number. We beg Dr. Bryan to accept our thanks for his valuable contributions.



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